WILLIAM BARRIFF L. Collonell

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MILITARY DISCIPLINE

OR THE YOUNG ARTILLERY-MAN.

Wherein is Diſcourſed and Showne the *Poſtures* both of *Muskes* and *Pike* the exacteſt way, &c.

Together with the Exerciſe of the Foot in their *Motions*, with much variety: As alſo diverſe and ſeverall *formes* for the *imbattelling* ſmall or greater *Bodies*, demonſtrated by the number of a ſingle *Company*, with their *Reducements*: Very neceſſary for all ſuch as are ſtudious in the *Art Military*.

Whereunto is alſo added the Poſtures *and* Beneficiall Uſe *of the* Halfe-Pike *joyned with the* Muſket. *With the manner how up the* Swediſh Brigade.

The 4th. Edition, Newly reviſed and much inlarged,

By

Captaine WILLIAM BARRIFFE.

Bleſſed be the Lord my ſtrength, which teacheth my hands to warre, and my fingers to fight. Pſalm. 144.1.

LONDON.

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16-196

To the Right Honourable ALGERNON, *Earle Of* Northumberland, *&c.*

Right Honourable,

THE Glory of the Meridian Sun is the more reſplendently ſet off by the toile and darkneſſe of a Shadow, which is a perpetuall follower of his light; as my ambition in all humble ſervice is, devoted to Your Lordſhip. The memory of ſo many Heroicall Anceſtours as (in all Ages) have ennobliz'd your potent Family; together with their Materiall and Renowned atchievements; doe for ever ſtand recorded in the Booke of Honour and Fame. And that (were occaſion fairly offered) your Honour hath Spirit and Bravery enough, in a Military emulation, to arrive up to the height of their glory: your conſtant and noble Deportments (as well in your private carriage, as of late in your publick Triumph, when you were inſtalled into that moſt Noble Order of the Garter) do moſt evidently preſage of you. This as it hath attracted all eyes and expectations: ſo hath it incouraged my low ambition (among the reſt) to eſteeme your Honour a fit Patron for a Book of this Nature. Your innate and imbred vertues, together with that Courteſie, Nobleneſſe, and Affability, (the inſeparable Companions of anciently deſcended Honour) ſpeak you ſo eaſie of acceſſe, that my *Young Artillery-man* deſpaireth not of acceptance and admiſſion to kiſſe the hands of your Great Lordſhip. The firſt fruits it is, of my weak endeavours, and the experiments of my private obſervations. Such as it is, my humble requeſt to your good Lordſhip, that out of the accuſtomed freedom and goodneſſe of your nature, you would be pleaſed to daigne acceptance of it: Even the acceptance and Patronage of this fourth Edition, as you pleaſed to do of the three former. Which as it may be an ample teſtimony of the continuance of your Honourable favours to the Author; So this my fourth Dedication ſhall give aſſurance to the World of the continuance and redoubling of my former devotions and obligations, and how well I was pleaſed, that ſo great a Peer vouchſafed the Patronage of the former. And I withall beſeech your Honour, to give pardon unto that preſumption, which hath proceeded from devotion. I confeſſe it an ambition in me, to ſoare loftily in my Dedication; But as *Alexander* (ſometimes) refuſed not a meane Preſent of Fruit from the hands of a ſimple Gardiner: ſo my hope is, your Honour will hold me excuſed for offering ſo worthleſſe and meane a Mite to ſo great and Honourable a Perſonage. Eſpecially conſidering that the ſubject of my Diſcourſe is intended for the bettering of the Souldiers knowledge of the Trained Bands; and that your Lordſhip is one of His Majeſties Lieutenants, it may prove a good inducement to your Honours liking (who are knowne to be ſo great a lover of your Countrey) to vouchſafe the protection and Patronage of theſe my endeavours, whereby I ſhall for ever ſtand obliged in all humility, and remaine,

Your Hounours moſt humble
and devoted Servant,
WILLIAM BARRIFFE.

To the Right Worſhipfull, Sir *Ralph Boſvile*, Knight; Captaine of a Scelect Company of Foot in the County of *Kent*.

YOu may be pleaſed to remember (Noble Sir) how often you have importun'd mee to write ſomething (by way of inſtruction) for the bettering of the judgment of ſuch young Gentlemen and Souldiers, whoſe minds ſtand this way affected. And although (for my owne part) I can better manage the Pike then the Pen; yet that I might not be wanting in all acknowledgment, I have taken upon me to ſatisfie your requeſt, which ſhall ever carry the authority of a command with it. Expect not (I beſeech you Sir) to find my Booke ſet forth with fine phraſes, nor to be decke with hiſtoricall diſcourſes of forraigne fought Battailes; this being the onely thing by me intended in it, to ſet forth the exact grounds of this our Moderne Diſcipline, for the exerciſing of a Foot Company. Nor is to be eſteemed a ſmall advancement to the knowledge of the Art Military; even to have taught this little, ſeeing it muſt be confeſſed to have beene one of the chiefeſt meanes, to make Philip from a poor Prince to become a powerfull Monarch; and his Sonne Alexander a mighty Conquerer, I mean his exact obſervance of the true grounds of Military Diſcipline, which beginneth with the inſtruction of a Private Company.

Adde hereunto (which I have alſo touch'd upon) his frequent practice, and inuring of his Souldiers to the uſe of Armes; together with his well ordering and contriving the ſeverall formes and Figures of his Battels. Alwayes (by the way) obſerving how to make his advantage, either from the time, the number, or the place, or ſome other ſuch like opportunity. But not to cloy your quainter eares with impertinent diſcourſes: who are not only a Maſter of Armes, but of Artes; alſo a Gentleman, that hath been Captain either over Horſe or Foot, for the ſpace of theſe laſt forty yeares: and from your very infancy brought up in the very boſome of the Muſes. So that now you are become a Neſtor for Counſell, an Apollo for Muſick, and a Mars for the Field. But leſt by acknowledging your worthy parts (your native modeſty being ſuch, that you never love to heare your owne due deſerved prayſes) I purchaſe a frowne for a recompence: I forbeare. My humble deſire now is, that your Worſhip will be pleaſed to accept of my well meaning: and although I be wanting in artfull expreſſions, yet to reſt aſſured that I am yours in all humble and hearty affection, and ſhall ſtill continue,

Yours,

WILLIAM BARRIFFE.

To

To all the Worthy Collonels, Lieutenant Collonels, Majors, and Captaines of the City of *London*; especially unto those that are, and continue Members of the *Artillery-Garden*; The Right Worshipfull *Philip Skippon*, Esquire, Serjeant Major Generall of all the Forces of *London*, and Captaine of that Ancient and Worthy Society exercising Armes in the *Artillery-Garden*.

Collonel, { *Thomas Atkins*, Alderman. / *Isaack Pennington*, Lord Major of *London*. / *John Wollaston*, Knight and Alderman. / *Thomas Adams*, Alderman. / *John Warner*, Alderman. / *John Towse*, Alderman.

Lieut. Collon. { *Marmaduke Rawdon*. / *George Langham*. / *John Venns*. / *Edmund Forster*. / *Matthew Forster*. / *Rowland Wilson*.

Serjeant Major. { *Rundell Manwaring*. / *Robert Davies*. / *William Geere*. / *Samuel Carlton*. / *Owen Rowe*. / *Thomas Buxton*.

Captaines { *Thomas Chamberlaine*. / *Francis West*. / *William Tucker*. / *William Tomson*. / *Matthew Sheppard*. / *Edward Hooker*. / *Richard Browne*. / *Thomas Player*. / *Richard Turner*. / *John Blackwell*. / *Francis Rowe*. / *Ralph Harrison*. / *Richard Cuthert*. / *Richard Hacket*. / *Edmund Harvey*. / *William Underwood*. / *Christopher Whidcot*. / *Robert Tichburne*. / *Nathaniel Canfield*. / *Robert Manwaring*. / *Thomas Gower*. / *William Manby*.

Collonel Captaine, { *Jonathan Gauthorn*. / *Forth Gooday*. / *Edward Bellamy*. / *Nathaniel Hawes*. / *Richard Wollaston*.

Right Worthy *Collonels* and *Captaines*,

ALthough it is commonly found, that every man by a kind of affection loves to magnifie and most to extoll those things, whereunto he finds his mind most *naturally inclined*. Yet all such *partiality* and private affection laid apart, the love to my *Country* gave the first heat unto this work. And the rather I was induced thereunto, because I held my selfe obliged; that my small *Rivolet* ought to make an acknowledgment or retribution to the *Ocean*, whence my poor streams were first derived. And therefore in the *first place* to you *selves* who are the *Collonels*, *Lieutenant Collonels*, *Majors* and *Captaines* over the *Trained Bands*, and are not onely the *chiefest powers* of our

city, but alſo of the *Artillery-Garden*: unto whom I was firſt beholding for the *Rules* and *Rudiments* of my *Military Inſtruction*.

And therefore Right worthy *Commanders* and *Captaines*, accept of this my acknowledgement; neither ſuffer any miſ-conſtruction to paſſe upon it, or impute it otherwiſe then to my *gratitude*. For this fourth publiſhing of my worthleſſe *Worke*, I hope ſhall give none of you offence, by reaſon that I know it is your *earneſt deſire* that (if it might be) *all his Majeſties Souldiers* and loving Subjects might be made perfect, both in the *practicke* and *theory*, and all other *neceſſary Requiſites* pertinent to the *Art Military*.

This is dayly manifeſted unto us, by your *frequent* bearing of *Armes* on *Generall daies*; whereby you not onely give a *powerfull* and *good* example to others, warning the *ſterility* of the *coldeſt affections*; but like ſo many *ſtuds* of *imbeliſhment*, you garniſh and adorne the *body of our Militia*. Perſiſt then, *worthy Captaines*, in ſo brave an intendment, and *immortalize your Poſterities*, by ingraving your *Names* in the Book of *Honour*: who neither want *skill* nor *courage*, *to merit* with thoſe, whoſe *Legends* have filled the *Trumps* of *Fame*. But I have ſoared beyond the modeſt bounds of your *Deportments*, for which I crave your pardons; by which you will further indeere,

For Yours,

WILLIAM BARRIFFE.

To

To the Reader.

COurteous Reader, although I have ſet forth this ſmall Treatiſe, principally ayming at the benefit of my countrey, yet I know that ſome will not be wanting, to diſparage both the workman and the work, the matter and the manner. For ſuch is the miſery of the times, and the malice of men; that the frothy Depraver, ſhall found (in ſome men) an opinion of his worth, by detracting and undervaluing other mens merits: For mine owne part, I ingenuuouſly confeſſe, that amongſt many in our owne ground, I was the meaneſt both for skill and skollerſhip, to have undertaken a work of this nature; but being continually preſt by my acquaintance: ſome for the Poſtures, others for the Motions, and by ſome againe for Figures, I being alwayes willing to further men this way affected; granted and gave to ſome men copies, and ſuffered others to peruſe my Notes, which I had placed in an old waſt Paper-book. But at length, time and mens tongues together, had begot an opinion, that I had writ a Book. Which was ſo freely divulged, that I was requeſted by ſome, to know when it would come forth of the Preſſe, when as yet I had not the leaſt conceit, to put pen to paper tending to this purpoſe. So that being engaged ſomething in my credit, and withall requeſted by a right worthy Knight and Captaine, who had power to command: And laſtly, being thruſt on by the importunity of ſome of my familiar friends: I have put my Card amongſt the reſt into the bunch to be ſhuffled: not much caring where it be dealt, ſo it be not mixt with the———If any carpe at the plainneſſe of the ſtile, I conceive that it fits beſt with ſubject: works of this nature, chiefly requiring it. If ſuch, whom opinion hath made proud, and cuſtome, captious, ſhall happen to be my Superviſours, to them I ſay, that it is eaſier to finde faults, then mend them; and to mend Books, then to make them. But to the courteous and skilfull, whoſe better parts will yeeld better fruits. I ſhall requeſt their favourable cenſure, and that with their judgements, they will mend what by overſight I have miſt. For which their loves, I ſhall ever ſtand engaged; and remaine,

Their thankfull friend
and Servant,

WILLIAM BARRIFFE.

To

An *Anagram*, and *Acroſtick* on his loving Friend, SER. MAJOR.

Anagramma { WILLIAM BARRIFFE. / *I fill fame by Warre.* }

I *f* Lilly, Camden, *and Learned* Vdall's *name*
F *inds memory ſtill, and fills the trump of* fame
I *n framing Rules for Youth, that might them teach*
L *earn'd Arts in tongues above the common reach:*
L *et then* Warres rudiments, *that here are brought*
F *or* Englands *good; by none be ſet at nought*
A *nd ſcorn'd: for they in time will make renoun'd*
M *en ſtudious in this* Art, *and their acts crown'd*
E *nduce: He that in* Warre *will ſeek to gaine,*
B *e perfect muſt in all, and that retaine.*
Y *oung though our* BARRIFFE *be, yet this his Book*
W *ill ſpeake him old, if well thereon you looke,*
A *ll* Poſtures *for the* Muſket, *and the* Pike
R *eformed are by him, and eke the like*
R *eſtor'd in* Motions *all, they there doe ſtand*
W *ith* Forms *and* firings *framed to your hand.*
I *n* Band *or in a* Regimentall way:
L *ooke here, and ſoon a* Figure *forme you may.*
L *ove to his Countrey, and our* Gardens *fame,*
I *n time prevail'd with him, to let* This *fame*
A *gaine to* Preſſe *be brought; O let not then*
M *ad rage, raſh cenſure, of proud ignorant men*
B *e prevalent: but let the learn'd, the juſt,*
A *nd eke the noble: yea all theſe that muſt*
R *enowned be, and will gaine* fame *by* Warre,
R *egard what's good, forbear harſh doome: then farre*
Y *our* fame *will flie, and we encourag'd ſhall*
F *rom* BARRIFF'S Young Artillery Man *ſeeke all*
F *or honours Wreath: and to* fill fame by Warre,
E *v'n here in* England, *and abroad full farre.*

THOMAS WHITLEY, Lieut.

To my worthy Friend the Authour.

HE that commends too poorely doth diſpraiſe,
And thoſe good parts he ſo commends, betrayes:
A ſilent admiration is the beſt,
When words fall ſhortt whereby ſhould be expreſt,
What we conceive, for faint and bare Commends
Meant for a praiſe, miſſe utterly their ends.

RALPH BOSVILE, Knight.

MILITARY

MILITARY DISCIPLINE

OR

THE YOUNG ARTILLERY MAN.

Chap. 1. *Concerning Postures and handling of Armes.*

THe first Rudiments of education, wherewithall to enter young *Souldiers* which desire to be instructed in that part of the *Art Military*, which concerneth the *Infantry* (or *Foot-Souldiers*) ought to be the *well managing and handling of their Armes*, which may easily be attained by frequent *Practice*, and the *Souldiers* thereby be brought to use them with *ease*, *safety*, and *delight*; where to the contrary (without it *exercise*) the *easiest Armes* become not onely troublesome burthens unto the *unskilfull bearers*, but too often prove dangerous and hurtfull, both to themselves and fellowes that *rank* and *file* with them. Neither need any be *discouraged*, for no man is born a *Souldier*, nor can attaine to any excellency in the *Art Military* without *practice*, but by *practice* is gained *knowledge*; *knowledge* begets *courage* and *confidence*, few or none being fearefull to execute what by frequent *practice* they have throughly *learned*.

And therefore it will be necessary for every one that intends any proficiency in this part of the *Art Military*, first to be instructed in the *Postures* and well *handling* of their *Armes* (a thing much to be desired in our *Trained Bands*, though small hope of amendment, seeing that our *Souldiers* are scarce called forth to exercise either *Posture* or *Motion* once in foure or five years. Whose the fault is, I know not; *only I pray God that it may be amended, lest shame and infamy be the least of evils which our careless security may bring upon us*: Yet pardon this digression, for my zeale to my Countries good had almost transported me beyond the bounds of my intent, but of this no more. I will now come to the *postures* of *Musket* and *Pike*, which some conceive, are fit est to *begin* from the *taking up* of their *Armes* and *arming* the *Souldiers*, concluding them with the *laying downe* of their *Armes*, or *disarming* them. Nevertheless because that some especially such as have beene in the parts beyond the Seas have not accustomed themselves to any strict observance of *Posture*, for *the arming and disarming of the Musketter*, but after the manner of the *field* come ready *charged*,

and *ſhoulder'd*, and ſo from thence making the entrance or beginning to the *Poſtures*, by which means others have been emboldned too cenſoriouſly to object againſt the reſt as ſuperfluous, which they themſelves at ſome time or other cannot avoid. Therefore to that end that they alſo may have ſatisfaction, I have ſo placed the *Poſtures* of the *Musket*, that they may make uſe of ſo many of them as they ſhall think neceſſary, and leave the reſt to ſuch as require a more exact and ample ſatisfaction. But before I expoſe the *Poſtures* to the publique ſurvay, me-thinks I heare ſome already enquiring what is *Poſture*? Wherefore, that I may ſatisfie them, and not be troubleſome to others; In briefe thus.

The definition of Poſture.

Poſture in a *Souldier* is the garbe or *figure* that he uſeth in the handling of his Armes, conſiſting of ſeverall *Motions* for atchieving of each *Poſture*. The *Motion* being the working part; the *Poſture*, the alteration or act, either in circumſtance or matter: As to *reſt* your *Musket*, being one *poſture*; to *ſhoulder* your *Musket* another, ſo likewiſe for the reſt.

Howbeit, ſome perchance will object (as formerly hath beene to one of *Athens*, making a long Oration in the praiſe of *Hercules* his valour) and ſay, who ever doubted of it? So to me, who ever queſtioned theſe for *Poſtures*? yet I have knowne them not onely queſtioned, but written againſt; peremptorily concluding, that there are but three *Poſtures* to be uſed for the *Musket*: whoſe errors I ſhall eaſily confute. But more of this after the *Poſtures* of the *Musket*. Wherefore for the more *orderly* proceeding, conceive their *Armes* to *lie before them on the ground*, and then the firſt *command* will be, to *ſtand to their Armes*.

The manner of Arming the Muskettier *and Poſtures of the* Musket.

Take up your } *Bandeliers.*
Put on your }

Take up your }
Place your } *Match.*

Take up your Musket and reſt.

Reſt your Musket.

Now if you pleaſe, you may performe your ſaluting Poſture.

Poyſe your } *Musket.*
Shoulder your }

Take your Reſt into your right hand, and you are armed ready to March.

Thus being *armed*, with *Muskets ſhouldred*, ſome account their *Poſtures* to begin from this place, which may be done either *ſtanding* or *moving*, as they ſucceſſively follow.

Take your Match betweene the fingers of your right hand.

Put your Reſt ſtring about your left wriſt, and carry your Reſt in your left hand.

Returne your Match betweene the fingers of your left hand.

Vnſhoulder your Musket, and Poyſe.

Ioyn your Reſt to the outſide of the Musket.

Open
Cleeve } *your Pan.*
Prime
Shut

Caſt off your looſe Cornes.

Blow off your looſe Cornes, and bring about your Musket to the left ſide.

Traile your Reſt, and ballance your Musket in your left hand.

Charge with Powder.

Draw forth } *your Scowring ſtick.*
Shorten }

Charge with Bullet.

Put your Scowring ſtick into your Musket.

Ram home your Charge.

With-

Withdraw / *Shorten* / *Return* } *your Scowring ſtick;*

Bring forward your Muſket and Reſt.
Poyſe your Muſket and recover your Reſt.

Thus having *charged*, ſome men will *ſhoulder*, and ſo from thence *make ready*, beginning their *Poſtures* from the *unſhouldring* of the *Muſket*, accounting of thoſe paſt as *Motions* of *Poſture*; but they doe but tangle themſelves in their owne ſnares, therefore I proceed:

Ioyne your Reſt to the outſide of your Muſket.
Draw forth your Match.
Blow your Coale.
Cock / *Fit* } *your Match.*
Guard your Pan.
Blow the Aſhes from your Coale.
Open your Pan
Preſent upon your Reſt.
Give Fire breaſt high.
Diſmount your Muſket, joyning your Reſt to the outſide of your Muſket.
Uncock and return your Match.
Cleer / *Shut* } *your Pan.*
Poyſe / *Shoulder* } *your Muſket.*

Take your Match between the fingers of the right hand.
Take your Reſt into your right hand, clering your ſtring from your wriſt.
Return your Reſt into the left hand, the ſtring looſe.
Return your Match into your left hand.
Unſhoulder your Muſquet and Poyſe.
Reſt your Muſquet.
* *Set the But-end of your Muſquet on the ground.*
Lay down your / } *Muſquet and Reſt.* / *Match.*
Take off / *Lay down* } *your Bandeliers.*
March from your Armes.

* *Set the But-end of your Muſquet on the ground, ſome (though improperly) call Ordering the Muſquet.*

There is likewiſe the *Sentinell Poſture*; which is, The *Muskettier* having his *Muſket charged*, with *Bullet*, his *Match cocke*, his *Pan guarded*, *ſtands* with his *Muſket reſted*, ready to *performe* ſuch *duty* as ſhall be *commanded* or given him in *charge*. Some have likewiſe taught to *make ready* on, or from the *Sentinell poſture*: But note, that as none comes to ſtand *Sentinell*, but comes *ready charged*, ſo if any occaſion happen that he muſt *give fire* in the time of his *ſtanding Sentinell*, it cauſeth an *Alarme* to that *Quarter*, or *Corps du-guard*, from whence he is ſet out; ſo that he will have no fit time *to make ready upon his Reſt*. Wherefore I conceive it ſuperfluous; but will ever conforme to better judgement.

The Sentinell Poſture.

We have alſo the * *Funerall poſture*, which from the *Reſt* is to be performed at three *Motions*, but cannot ſo well be expreſt in writing, as it will expreſſe it ſelfe in *Action*. Wherefore ſeeing that it is rather an Ornament to Obſequies, then truly neceſſary for *Armies*, I will not ſpend more time about it, but come to the *Poſtures* of the *Pike*. Yet before I paſſe upon them, give me leave to anſwer ſome, which out of a Critticall humour will alwayes be caping at others, condemning theſe *Poſtures*, ſaying, there are more by halfe; then are either good or uſefull; and that there are no more *Poſtures* to be uſed, but *Make ready*, *Preſent*, *Give fire*. The which we will not deny, that in *Service* there are any other Commands *uſefull*: notwithſtanding I would have them to know, that * *Make ready* is no *Poſture*, but a word of *Command*, including *all Poſtures*, from the firſt *arming* of the *Souldier* to the *Preſent*: or if the *Muſquettier be charged*, *ſhouldred*, or *both*,

* *The Funerall Poſture.*

* *Make ready no Poſture, but a word of Command.*

both, then the word (*Make ready*) *commands* the proſecution of the reſt of the *Poſtures* which are betweene the *poſture* you then immediatly are at when the *word* is given, and the other *poſture*, *preſent*; for with reaſon, when we teach *Muſketiers* at firſt, it is moſt neceſſary to inſtruct them punctually from *poſture* to *poſture*, which being once attained, they will *manage their Armes* more *ſurely*, more *comely*, with more *celerity* and with better *execution*; and at the firſt may eaſily be taught the beſt way. But if they have once got an habit of doing ill, there will be as much or more paines ſpent in reclaiming their errors, as at firſt to teach them the beſt, ſafeſt, and readieſt way.

Ill cuſtomes hardly reclaimed.

Chap 2. *Of the Poſtures of the Pike.*

THat which followeth next of courſe is the *poſture* of the *Pike*; Wherefore that we may obſerve *Order* in our proceeding; wee will likewiſe conceive their *Pikes*, to lie in like manner before them on the *ground*: And then, as before, the *firſt Command* will be, To *ſtand* to their *Armes*.

Handle your Pikes.

To your { (a) *Open* / (b) *Cloſe* } *Order.*

Charge from the Foot.

Which is to *Charge* with the *But-end* of your *Pike* at the *inſide of your right Foot*, *your Pike in the left hand*, *drawing your Sword over the left Arme.*

Charge to the { *Right.* / *Left.* / *Reere.* }

Order your Pikes, and put up your Swords.

Note that theſe *Charges at the Foot* are to *receive a deſperate enemy on Horſe*, upon a *ſtand* in ſome *ſtreat*, or other *place of advantage*, the *Muſketiers to give fire over the Pikemens heads*, or *elſe-where* at the diſcretion of the *Commander*.

From Order { *Port* / *Comport* / *Check* / *Traile* } { *your Pikes* } Order as you were.

(c) *Charge to the* { *Front* / *Right* / *Left* / *Reere* } Order as you were.

Shoulder your Pikes.

Advance your Pikes.

From Advance { *Port* / *Comport* / *Cheeke* } { *your Pikes* } Advance as you were.

Traile your Pikes.

Advance as you were.

Charge to the { *Front* / *Right* / *Left* / *Reere* } Advance as you were.

Shoulder your Pikes.

From the ſhoulder { *Port* / *Comport* / *Cheeke* / *Traile* } { *your Pikes.* } Shoulder as you were.

(a) Open Order in reſpect of poſture for the Pike, is when the file ſtand at double diſtance, or open Order at the leaſt, then the Pikemen are to extend their right Armes, and place their Pikes about a foot to the right of the right Legs: it is uſefull only to make a gallant ſhew. (b) Cloſe Order is to place the But-end of the Pike on the inſide of the right foot, and is onely uſefull upon a ſtand, to receive and abate the fury of the Horſe, upon a deſperate charge. (c) Charge to the Reere is be underſtood alwaies to the left about, becauſe it is three times a neerer way then charging to the right about.

Charge

Charge to the { *Front, Right, Left, Reere* } Shoulder as you were.

From *Comport*, *Cheeke*, or *Traile*, the *Pikemen* may at the diſcretion of the *Commander*, *charge* either to the *Front*, *Rear*, or *Flanks*, as ſhall be neceſſary or thought expedient. I will doe it only once over, for the *Charges* will be all alike, whether you *Comport* from *Order*, from *Advance*, or *Shoulder*. And ſo likewiſe for *Cheek* and *Traile*, &c.

From Comport Charge to the { *Front, Right, Left, Reere* } Comport as you were.

Traile your Pikes.

From the Traile. Charge to the { *Front, Right, Left, Reere* } Traile as you were.

Check your Pikes.

From the Cheek Charge to the { *Front, Right, Left, Reere* } Check as you were.

Order / *Lay down* } your Pikes.

I ſhall undergoe the cenſure of ſome, for that they will finde more *Poſtures* of the *Pike* here then formerly they knew of, and ſo by their concluſion more then there is any need of; for now a-dayes there are ſuch that will limit the *Diſcipline* of the *Muſia*, to the verge of their own knowledge; and whatſoever elſe they ſhall ſee either *acted*, or written by others, that is without the liſts of their *kenning*, they will peremptorily conclude for ſuperfluous and improper, howſoever I ſhall alwaies referre my ſelfe to the judgment of the more judicious.

The *Charges* of the *Pike* are *twofold*, either for *defence* or *offence*. *Charges underhand* or *overhand*; but divers and different they are from their ſeverall *wayes* and *Poſtures* from which they are, or may be done, although they are not all alwaies *uſefull*, yet ſometimes they may be *uſefull*, and therefore very requiſite to be knowne to all ſuch as either are, or at leaſt would be accounted for *good Souldiers* *The uſe of the Pike.*

As I have ſet downe the *poſtures* themſelves both of *Musket* and *Pike*, ſo it were not amiſſe, if that the *Motions of poſture*, were likewiſe here expreſt. But becauſe they will take up too much time, and fill too much Paper, and the ſubject it ſelfe not pleaſing unto many; I will ſpare my labour, and my Book the lines, rather ſuffering the cenſure of curtail'd brevity, then tedious prolixity.

Chap. 3. *Of the Drum.*

OUr *Souldiers* being ſufficiently *inſtructed* in the *Poſtures* of ſuch *Armes* as they *carry*, (or are appointed to uſe:) the next thing they are to *learn* is the *knowledge* of the *ſeverall beats* of the *Drumme*, which is as requiſite to be *learn'd* of the *Souldier*, as any thing elſe in this *way* For the *Drum* is the *voice* of the *Commander*, the *ſpurre* of the *valiant*, and the *heart* of the *coward*; and by it they muſt receive their *directions*, when the *roring Canon*, the *claſhing*

of *Armes*, the *neighing* of *Horſes*, and other *confuſed noiſe* cauſeth, that neither *Captain*, nor other *Officer* can be *heard*. Therefore it will be neceſſary that every Souldier ſhould learn theſe ſix ſeverall Beats, *viz.*

1. A Call. 3. A March. 5. A Battell.
2. A Troop. 4. A Preparative. 6. A Rerreit.

A Call. 1. By a *Call*, you muſt *underſtand* to *prepare* to heare preſent *Proclamation*, or elſe to repaire to your *Enſigne*.

A Troop. 2. By a *Troop*, *underſtand* to *ſhoulder* your *Muſquets*, to *advance* your *Pikes*, to cloſe your *Ranks* and *Files* to their *Order*, and to *troop along* with (or *follow*) your *Officer* to the *place* of *Randevouz*, or elſewhere.

A March. 3. By a *March* you are to *underſtand* to *take* your *open order* in *rank*, to *ſhoulder* both *Muſquets* and *Pikes*, and to *direct* your *March* either *quicker* or *ſlower*, according to the *beat* of the *Drum*.

A Preparative. 4. By a *Preparative* you are to *underſtand* to *cloſe* to your *due diſtance*, for *skirmiſh* both in *Rank* and *File*, and to *make ready*, that ſo you may *execute* upon the *firſt command*.

A Battell. 5. By the *Battell* or *charge*, *underſtand* the *continuation* or *preſſing forward* in *order* of *Battell* without *lagging behind*, rather boldly ſtepping forward in the *place* of *him* that *falls dead*, or *wounded* before thee.

A Retreit. 6. By a *Retreit*, *underſtand* an *orderly retiring backward*, either for *reliefe*, for *advantage* of *ground*, or for ſome other *politicall end*, as to *draw* the *enemy* into ſome *ambuſhment*, or ſuch like. Much more might be written concerning the *Drum*, but this may ſuffice for the preſent.

Chap. 4. *Of Ranks and Files, their places and dignities.*

What is a Rank. What is a File.

NOw that our *Souldiers* are ſomewhat *skilfull* in *managing* of their *Armes*, and no leſſe capable of the ſeverall *beats* of the *Drum*, it is high time for them to know the difference between a *Rank* and a *File*. Wherefore know that a *Rank is a row of men, ſometimes more, ſometimes fewer, ſtanding, moving, or marching even a-breaſt*, or (as ſome write) *pouldron to pouldron*, or *ſhoulder to ſhoulder*. A *File is a ſequence of men, ſtanding one behind another, back to belly, in a ſtraight line from Front to Rear*, conſiſting ſometimes of ſix, eight, or ten men, on ſome occaſions the *Spaniards* make them twelve *deep*. But when any one would ſhew much *variety* of *exerciſe*, then eight will be the more *pliant* and *dividuall number*, yet for *ſervice* in the *Field*, where men are not altogether ſo *expert* (as I could wiſh our Countrey-men were) ten men is a fit number, not onely for the cauſe aforeſaid, but alſo becauſe that ten is the *ſquare Root* of a hundred, and is a convenient number to draw *Companies* into *groſſer bodies*.

Women are expert S. is a ſufficient depth, and may better keep their order then when they are deeper.

And now I think, it would not be much amiſſe, if I ſhould here inſert the ſeverall *places* of *dignity* and *precedencie* in *Rank*, as alſo in *File*. Wherefore becauſe that * *Files* are firſt to be *drawne forth*, and that by *adding* or *joyning* of *Files* together, *Ranks* are made; wee will begin *firſt* with the precedence of *Files*. Therefore conceive their *dignities* according to the *Figures* (or *Numbers*) here under *placed*, firſt in *File*, then of *Rank*, laſtly of *both conjoyned*.

* *In placing your Men, firſt draw your Souldiers forth in Files, and not in Ranks, as ſome have fondly uſed.*

Front,

Front.

Front.	Number of dignity.	Number of dignity.
1. p1.	2 6 7 3 4 8 5 1	2 6 7 3 4 8 5 1 0
2. p5.	p p p p p p p p	p p p p p p p p 1
3. p8.	8 7 6 5 4 3 2 1	8 7 6 5 4 3 2 p1
4. p4.	Number of place.	Number of place. 3 p8
5. p3.		4 p4
6. p7.		5 p3
7. p6.		6 p7
8 p2.		7 p6
Reer.		8 p2

Number of Dignity. Number of Place. Number of place. Number of Dignity.

It will not be (of it selfe) sufficient that I have here both *Marked*, and *Figured*, each *single worth*; thereby pointing out the severall *places*, and *dignity*, *proper* to each *particular man*, in his *File* and *Rank*: but it will bee expected of some, that I should back my *Conclusions*, either with sound, and solid reasons of mine owne, or at least, with the concurring opinions of others. But as for such, who have imployed themselves upon this *Subject*: either for want of due consideration, or a rationall understanding *the parts of a File*, they have voted their *Judgements*, as divers as their *number*; each man having a fancie to his owne *way*. And if it were much *materiall*, I might here demonstrate unto you, the severall opinions, of *Leo*, *Robertellus*, *Count* * *Mansfield*, Sir *Tho: Kellie*, and many others: but their *works* being *extant*, I will spare the labour. Nevertheless I will say thus much, that *Captain Iohn Bingham*, although somewhat *obscurely*, yet, in my judgement, hath best delivered himselfe concerning this particular: which although he have expresst by way of *Tetrarchies* and *Hexarchies*, the same may be understood as well by *Ranks* and *Files*. His words are these: "‡ *Every Tetrarch is over foure Files, in all which the Commander that hath the right,* "*hath the first place; hee that hath the point of the left, the second place; hee that* "*standeth on the right hand next to him, the third place. The last place is his that stan-* "*deth next to the Commander of the right point on the left hand*: *He demonstrates it by way of figure thus.*

* *Beco's set out in his name, but none of his.*

‡ *In the Tacticks of Ælian. lib. 1. the Notes of the tenth Chapter.*

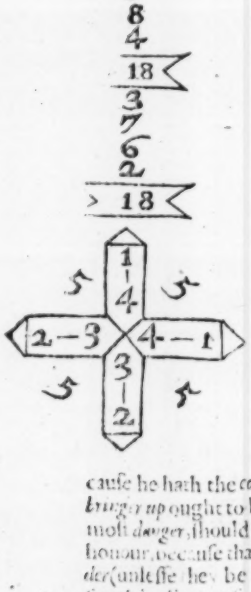
	pmm.	mmp.	pmm.	mmp.	
Right wing.	1 5 1	4 8 4	3 7 3	2 6 2	Left wing.

The Middle.

Chap. 5. *Reasons for precedency of dignity in Ranks and Files.*

I Shall now endeavour to give some *reasons* for these *severall places* of *dignity* in *Rank* and *File*. And first for that Geometricall proportion, gives both *life*, and *being*, to *orderly discipline*, consider that all *parts* of the *body*, ought to bee *answerable*.

anſwerable. Wherefore ſeeing that the *joyning* of *Files* and *Ranks* produceth *greater Bodies*; it is a neceſſary that a true proportion ſhould be kept from the *beginning*: and that in *drawing forth* of *Files*, they obſerve to make the *Reer half-file* anſwerable in *skill* and *worth* to the *Front-halfe-full*. And that the *File-leaders*, and *half-ranks* of the *left flank*, ſhould be equivalent in *worth*, *skill*, and *valour* to the *right flank*, that the *Reer-diviſion* hold like proportion with the *Front-diviſion*, and that all *parts* of the *body* be *ballanced* with true *proportion*, ſo neare as the knowledge of the *Souldiers*, and the *number* of the *men* will give you *leave*, and that there may be correſpondency in their *worth*, *place*, and *dignity*, you may obſerve by adding the *figures* of *number* together, which are in the *Margent*, where you ſhall find that the *dignity* being added together of the *Front-half file*, makes the number of 18. And the *worth* of the *Reer-half* being in like manner added, makes the *like number*. So alſo ſhall you find the *dignity* and *worth* of the *File-leaders* of the *left flank*, to parallell the *worth* of thoſe on the *right flank* by the ſame *rule*. If you will have it yet more clere, obſerve that the *File-leader* is the *chiefe* in his *file*, the *Bringer up* the *ſecond*, the *halfe-file-leader* the *third*, the laſt man of the *front-half-file* the *fourth*. Now note, that as the *worth* of the *firſt* precedes the *ſecond*, ſo the *worth* of the *third* exceeds the *fourth*: Adde the *firſt worth* to the *fourth worth*, and that makes *five*: adde the *ſecond worth* to the *third*, and it makes the ſame *number*; ſo that there is *equality* throughout the *Battell*, both in *Front Reer*, and *Flanks*: for it were unreaſonable, that all the *chiefe men* ſhould be on the *right flank*, and all the *worſt* on the *left*. For the *left* muſt be *oppoſed* to the *enemies right*. The *File-leader* ought to be *worthieſt*, becauſe he hath the *command* of his *file*, and *marcheth firſt againſt* his *enemy*. The *Bringer up* ought to be the *ſecond*, becauſe his *place* of *march* is in the *reer*, and is in moſt *danger*, ſhould the *enemy charge* on that *part*: the *half file-leader* is the *third* in honour, becauſe that when the *half-file* is *taken off* upon any *occaſion*, hee is the *leader* (unleſſe hee be *commanded* to *face about* the *laſt man* of the *front-half-file* is the *fourth* in *dignity*: for when the *Reer-diviſion* is *taken off*, then he is the *Bringer up*, or the *file* being faced about, he is the *half file-leader* to the *Reer*. The next *man* to the *file-leader* hath the *fifth place* of *honour*, for that one *doubling brings him into the Front*. The next *man before* the *Bringer up* hath the *ſixt place* of *honour* for that if the *body* be *faced about*, one *doubling brings him into the Front accidentall*, or keeping the *proper Front* by once *doubling* of *ranks*, he becomes *bringer up* to his *file leader*. The *ſeventh place* of *honour* is his that *marcheth* next after the *halfe file-leader*, for that when the *halfe files double the Front*, or *marcheth forth*, then one *doubling*, *ranks him even* with the *Front*. The *eight* and *laſt place* of *honour*, is *his* that is the *third* from the *Front*, the *file* being but eight *deep*, which may alſo be *made a file-leader* though with more trouble then the reſt: for by *Countermarching Front and Reer into the middeſt*, and then *facing* to the *former Front*, and after *doubling* of *ranks*, makes him likewiſe *a file-leader*. Now, as



every

every mans dignitie is more or lesse in his file, so is all his rank with him. Wherefore this that hath already been said, may suffice to informe those which as yet are ignorant of the severall *places of dignitie*, both in *rank and file*. Nevertheless, for the clearer *Demonstration* of these *rules of dignitie, and for that they are of more concernment then at first every man can imagine*; I have drawne forth *three Tables*. The first of *six deep* and *six* a-breast; The second of *eight deep*, and *eight* a-breast; The third of *ten deep*, and *ten* a-breast: which will shew the particular *dignities* due to each man, in *rank* and *file*, I have also added, *three other square Tables* the first of *thirtie six men*, the second *sixtie foure*, the third of *one hundred*. And in *each Table I have* shewed every mans place of *dignitie*, in *file* and *rank*, as also in the *joined body*, from the *first and chiefe* to the *last* and *least* in *dignitie*, by figures of number, with an addition of their summes together, to shew their *uniformitie*, and proportion to each other.

The places of Dignitie of tenne in Ranke.

2	6	10	7	3	4	8	9	5	1

The places of Dignitie of tenne in File.

5
9
8
4
5
7
10
6
2

The places of Dignitie of eight in Ranke.

2	6	7	3	4	8	5	1

The place of Dignitie of eight in File.

5
8
4
3
7
6
2

The places of Dignity of 6. in Ranke.

2	6	3	4	5	1

The places of Dignitie of 6 in File.

5
4
3
6
2

Rules of dignity ought not to be regulated by ill customes, conceited opinions and false grounds) but by truth and reason.

The Table of Dignity for 36. Men.

	48	60	51	54	57	45	
11	2	6	3	4	5	1	10
83	26	30	27	28	29	25	82
65	20	24	21	22	23	19	64
47	14	18	15	16	17	13	46
101	32	36	33	34	35	31	100
29	8	12	9	10	11	7	28
	54	66	57	65	63	51	

The Table of Dignity for 64. Men.

		520							
	120	136	140	124	128	144	132	116	
18	2	6	7	3	4	8	5	1	18
146	34	38	39	35	36	40	37	33	146
242	58	62	63	59	60	64	61	57	242
114	26	30	31	27	28	32	29	25	114
520 82	18	22	23	19	20	24	21	17	520 82
210	50	54	55	51	52	56	53	49	210
178	42	46	47	43	44	48	45	41	178
50	10	14	15	11	12	16	13	9	50
	120	136	140	124	128	144	132	116	
					520				

The Table of Dignity for 100. Men.

	230.	250.	270.	255.	235.	240.	260.	265.	245	225.	
28	2	6	10	7	3	4	8	9	5	1	27
228	42	46	50	47	43	44	48	49	45	41	227
428	82	86	90	87	83	84	88	89	85	81	427
378	72	76	80	77	73	74	78	79	75	71	377
178	32	36	40	37	33	34	38	39	35	31	177
128	22	26	30	27	23	24	28	29	25	21	127
328	62	66	70	67	63	64	68	69	65	61	327
478	92	96	100	97	93	94	98	99	95	91	477
278	52	56	60	57	53	54	58	59	55	51	277
78	12	16	20	17	13	14	18	19	15	11	77
	240	260	280	265	245	250	270	275	255	235	

If you pleaſe to make an experiment, of the *uniformity* and *proportion*, that one *file* or *ranke* holdeth with another, and would firſt make tryall of a *file*, then adde the number of one *file* together, (which done) adde the numbers together, of the next *file* in dignity, into one ſumme: Then *ſubſtract the leſſer number out of thee greater*, and you ſhall alwaies find, that one *file* precedes the other, no more then there are particular places in a *file*: as ſix; in files of ſix deep: *eight*; in *files* of eight deep, and *ten*, in *files* of ten deepe, the which makes no diſproportion, but are only *numbers* of *diſtinctions*.

Files precede each other in dignity according to their places. Each man in the right hand file, preceding him of the ſame

Would you make an *experiment*, *between the dignity of rank and ranke*; then as before adde the *ſimple numbers* together of one *rank*, the which being found *adde the ſimple numbers together* of the next *rank in dignity*: The which in like manner *place in the left hand file, which makes the difference of number between them ſix, at ſix deep, eight at eight deep, &c.*

‡ *The difference betwixt every next ranke of dignity, in the Table of 36. is the same number.*

being performed, *substract the lesser number out of the greater*, and you shall find the remainder alwayes to be the *compleat number of the square body.* ‡ As for example in the table of *thirty six, adde the numbers of the first* rank (*or file-leaders*) together; and you shall find by addition *twenty one*; adde the numbers of the second *ranke in dignity* (which are the bringers up together, and you shall find *fifty seven.* Then *substract* the number of the *first ranke from the second* in *dignity*, and the remainder will be *thirty six*, the just number of the *whole Square.* ‡ And so in like manner is the number of difference, betweene every two next *ranks of dignity* in that Table. The other Tables in like nature, having the same difference, according to the number of the Body, either of *thirty six, sixty four*, or * *one hundred.* But I doubt I shall be blamed for tedious curiosity; because I have insisted longer upon this subject then at first I intended, which makes me the more willing, though somewhat abruptly to break from it, and come to shew the manner of joyning or drawing up of *files* into *Battalia.* To which purpose the *Serjeants* are first to draw forth their *files*, and after to *lead* them up into *Order*, according to every mans *worth* and *honour.* As first the *right-hand file*, then the *left-hand file*, and so the other *files* successively *within them*, according to their severall *worths* and *places.* As by the following *forme*, and the *figures* of number you may plainly perceive.

‡ *In the Table of 64. the difference betweene the next rankes of dignity is 64.*

* *In the table of 100. the difference is the like number of 100. &c.*

Front.

Dignity of place.

Left Flanke. Number of place.										Right Flanke. Dignity of place.
	0	2	6	7	3	4	8	5	1	0
	1	m	m	m	m	m	m	m	m	1
	2	m	m	m	m	m	m	m	m	5
	3	m	m	m	m	m	m	m	m	8
	4	m	m	m	m	m	m	m	m	4
	5	m	m	m	m	m	m	m	m	3
	6	m	m	m	m	m	m	m	m	7
	7	m	m	m	m	m	m	m	m	6
	8	m	m	m	m	m	m	m	m	2
	0	8	7	6	5	4	3	2	1	0

Number of place.

Reere.

If there be any that shall say these are *nicities*, and of no repute amongst *Souldiers*, I dare say they have beene well reputed of by good *Souldiers*, no disparagement unto the fault-finders (if there happen to be any such.) As for the noble, worthy, and well-knowing *Souldiers*, I am almost confident that out of their true-speaking judgments, they will either conclude that it is so used, or at least, that it ought so to be; but if this can worke no effect with the———— I leave every man freely to his owne judgment, desiring the judicious alwayes to hold a favourable opinion of my well-meaning.

Chap.

Chap. 6. *Of the ſeverall diſtances.*

NOw that our *Souldiers* have attained ſome ſmall knowledge in the uſe of their *Armes* (me-thinks like ſome of * *little knowing Souldiers* of the *Trained Bands*) they already begin to be ambitious of *file leaders places*; therfore that their owne *weaknesſes* may light them to read their owne follies, wee will ſee how they will behave themſelves in the exerciſe of the Company. Where the firſt thing we are to inſtruct them in, is their *diſtances*. But becauſe it is diſputable whether *diſtance* be one of the *Motions* or no, wee will firſt declare what *diſtance* is. To which I ſay, that indeed * *diſtance* it ſelfe is no *motion*, but there is *motion* in producing ſuch *diſtance*; *for diſtance is the ſpace of ground betweene man and man, either in file, or ranke, having relation onely to the place betweene each party.* All the reſt of the *motions having not* only relation to the one, but to the other. Wherfore not to ſpend more time in a matter ſo apparent, we will ſay that the diſcipline of a *Foot Company* conſiſts chiefly in *diſtance* and *motion*. And therefore ſeeing that *diſtance* is the forerunner of *motion*, and that ‡ no *motion* can be performed without *diſtance*, wee will leave to diſcourſe it, and fall to the matter it ſelfe, and ſhew how many ſorts of *diſtance* is ordinarily uſed in our moderne *diſcipline*, which are theſe *four* hereunder named, *viz.*

Cloſe Order,	which is both in *Ranke* and *File*	*One foot and a halfe.*
Order,		*Three foot.*
Open Order,		*Six foot.*
Double diſtance,		*Twelve foot.*

‡ It hath been the opinion of ſome ancient Commanders, that the *diſtance of Ranke*, was alwaies *double the diſtance of file*, although they went both under one and the ſame denomination. As that *order in file* was *three foot*, *order in ranke ſix foot*, *open order in file ſix foot*, *open in ranke twelve foot*, and ſo of other *diſtances*. But the beſt received opinions hold them to be alike, both in *rank* and *file*.

There is to be conſidered in *diſtance* theſe three eſpecially, that is,

Diſtance for { *March.* *Motion.* *Skirmiſh.*

You are to obſerve, that your *diſtance* for *march* is to be three foot betweene *file* and *file*, and ſix foot betweene *ranke* and *ranke*. *diſtance* for *Motion* ſix foot both in *rank* and *file*, *diſtance* for *intire doublings*, *wheelings*, and *Skirmiſh*, three foot in *rank* and *file*. *Cloſe order* is uſefull for your *files* of *Pikemen*, when they are to receive a *Charge* from the *Horſe*: that ſo they may *ſtand* the ſtronger, by ſo much as they are the *cloſer ſerried together*; as alſo for the *ranks* of *Musketiers*, when they are to powre on a ſalve of *ſhot*.

It next followes, that I ſhew the divers words of *command* and *direction*, for the ſeverall *openings* and *cloſings* of *ranks* and *files*. But I ſhall firſt recommend to the care of the curious *Diſciplíner*, that in the firſt place he *command* his *Souldiers* to even their *ranks* and ſtreiten their *files*; to be *ſilent*, and *attentive* to their words

* *Ignorant Souldiers moſt ambitious.*

* *Diſtance it ſelfe no motion.*

‡ *Without diſtance no motion can be performed.*

‡ *Diſtance of rank is to be underſtood betweene ranke and ranke. Diſtance of File is to be underſtood betweene File and File.*

The exact place from whence to meaſure your diſtance is from the Center of your men, whether it be rank or file.

Theſe three diſtances eſpecially remarkable.

words of *command* and *direction*; which being performed, the words of *command* for *diſtance* are as followeth.

In motion of Files you are to obſerve your Leader. In motion of Ranks you are to obſerve y ur right hand man

Ranks and files to your cloſe order.
Files open to the right } *to your*
Ranks open forward } *order.*
Files open to the right } *to your open*
Ranks open forward } *order.*
Files open to the right } *to your double di-*
Ranks open forward } *ſtance.*
Files cloſe to the right } *to your open*
Ranks cloſe forward } *order.*
Files cloſe to the right } *to your*
Ranks cloſe forward } *order.*
Files cloſe to the right } *to your cloſe*
Ranks cloſe forward } *order.*
Files open to the left } *to your.*
Ranks open backward } *ord r.*
Files open to the left } *to your open*
Ranks open backward } *order.*

Files open to the left } *to your double di-*
Ranks open backward } *ſtance.*
Files cloſe to the left } *to your open*
Ranks cloſe backward } *order.*
Files cloſe to the left } *to your*
Ranks cloſe backward } *order.*
Files cloſe to the left } *to your cloſe*
Ranks cloſe backward } *order.*
Files } *open* } *right and left* } *to your*
Ranks } *to the* } *front and reer* } *order.*
Files } *open* } *right and left* } *to your o-*
Ranks } *to the* } *front and reer* } *pen order.*
Files } *open* } *right and left* } *to your*
Ranks } *to the* } *front and reer* } *double d.*
Files } *cloſe* } *right and left* } *to your o-*
Ranks } *to the* } *inward* } *pen order.*
middeſt ____ }

Obſervations for the opening of ranks and files.

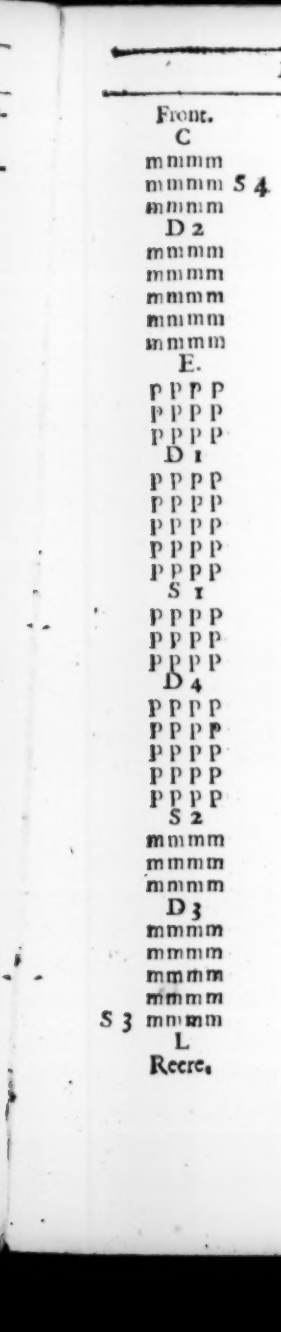
Note that when *files open* to the *right*, the *left hand file* muſt ſtand *faſt*, every *file* taking his *diſtance* from the *file next* his *left hand*; and when they *open* to the *left*, then the *right hand file ſtands*, every *file* taking his *diſtance* from the *file* next his *right hand*. Obſerve alſo, that when *ranks open forwards*, then the *laſt rank ſtands*, every *rank* taking his *diſtance* from the *rank* next behind him: And when they *open backwards*, then the *firſt rank is to ſtand*, every *rank* to take his *diſtance* from their *rank* next before him. You are likewiſe to take notice in the *action*, that you are either to face to the *right*, or to the *right about*.

Obſervations for the cloſing of ranks and files.

Note alſo, that in *cloſing* of *files*, if it be to the *right*, then contrary to the *opening*, the *right hand file ſtands*, the reſt *cloſing* to the *right*, taking their *diſtance* from the next *right hand file*. If you *cloſe* to the *left*, then the *left hand file ſtands*, the reſt of the *files cloſing* to the left, taking their *diſtance* in like manner. When *files cloſe to the right and left*, then they *cloſe inward*, taking their *diſtance* from the *files within* them, neerer to the midſt of the *Body*. Alſo note, that when *files* are commanded to open to the *right* and *left* (or by *diviſion*) it muſt be *outward*. If *ranks* cloſe to *Front* and *Reere*, then the firſt and laſt *rank* ſtand; the others taking their *diſtances* from them. If they cloſe *ranks* towards the *center* or *midſt*, then they *cloſe* towards their two middlemoſt *ranks*.

It is not required that every *Captaine* or other Officer that ſhall exerciſe a Company, ſhall uſe all theſe ſeverall *openings* and *cloſings* which are here expreſt, but rather that he ſhall make uſe of ſo many of them as he ſhall think fit for his preſent occaſion or *exerciſe*. Although they all may be uſefull at ſome time or other. I may ſpare examples, for it muſt needs be apparent to the meaneſt capacity.

Chap.



Chap. 7. *Of marching the Company in Diuiſions, with the order and places of the the Officers and Drums.*

OUr *Souldiers* now being ſomewhat *expert* in their *diſtances* wee will next draw them forth into a *deep March*. Wherefore note, that our *files* muſt be at *order*, and our *ranks* at *open order*; the *Muſkettiers* of the *right flank* are to make the *Van*, and to *march* next after the Captaine; the *Pikes* are to make the *Battell* and to *march* after the *Enſigne*, either in one or two *diviſions*, according to their number. The *Muſkettiers* of the *left flank* (ſometimes called the ſecond *diviſion* of *Muſkets*) make the *reer guard*, which is led commonly by the ſecond Serjeant. Howbeit if there be but one *diviſion* of *Pikes*, then the eldeſt (or chiefeſt) Serjeant leads the ſecond *diviſion* of *Muſkettiers*. If the Company be but ſmall, then it is beſt to make but two *diviſions*, one of the *Muſkettiers*, another of the *Pikes*; For the placing of the reſt of the Officers you may perceive by the *figure* in the Margent: Wherefore note, that m. ſtands for *Muſkets*; p. for *Pikes*; D. for *Drums*; S. for *Serjeants*; E. for *Enſigne*; L. for *Lieutenant*, and C. for *Captaine*.

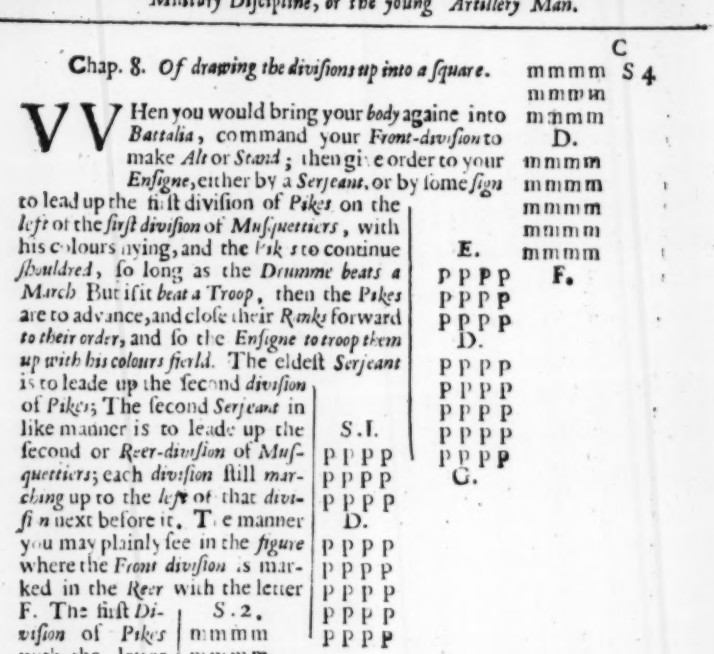
Note, if you have but three Drums, then let the Drumme in the ſecond *Diviſion* of *Pikes* be wanting: If only two, then upon a *March* the firſt betweene the third and fourth *Ranke* of the *Front diviſion* of *Muſkettiers*; the ſecond betweene the third and fourth *Rank* of the ſecond *diviſion* of *Pikes*.

Note, that betweene each *Diviſion* in *March*, there ought to be twelve foot *diſtance*; ſix foot before the Officer, and ſix foot behind him.

Chap.

Chap. 8. *Of drawing the diviſions up into a ſquare.*

WHen you would bring your *body* againe into *Battalia*, command your *Front-diviſion* to make *Alt* or *Stand*; then give order to your *Enſigne*, either by a *Serjeant*, or by ſome *ſign* to lead up the firſt diviſion of *Pikes* on the *left* of the *firſt diviſion* of *Muſquetiers*, with his colours flying, and the *Pikes* to continue *ſhouldred*, ſo long as the *Drumme beats a March* But if it *beat a Troop*, then the *Pikes* are to advance, and cloſe their *Ranks* forward *to their order*, and ſo the *Enſigne to troop them up with his colours fierld*. The eldeſt *Serjeant* is to leade up the ſecond *diviſion* of *Pikes*; The ſecond *Serjeant* in like manner is to leade up the ſecond or *Reer-diviſion* of *Muſquettiers*; each *diviſion* ſtill *marching* up to the *left* of that *diviſion* next before it. The manner you may plainly ſee in the *figure* where the *Front diviſion* is marked in the *Reer* with the letter F. The firſt *Diviſion* of *Pikes* with the letter G. The ſecond *Diviſion* of *Pikes* with H. The ſecond *Diviſion* of *Muſketiers* hath in the *Reere* the letter I. The other *figure* on the other leafe in forme of a *ſquare* ſhewes their ſtanding after the *Diviſions* are led up. All the *File-leaders* ſtanding even in *Front*, together making one *Rank*.



E.

E C

2 6 7 3 2 6 7 3 4 8 5 1 4 8 5 1

S 2 1 mmmmD p p p p p p p p Dmmmm 1 S 1
2 mmmm p p p p p p p p mmmm 5
3 mmmm p p p p p p p p mmmm 8
4 mmmm p p p p p p p p mmmm 4
5 mmmm p p p p p p p p mmmm 3
6 mmmm p p p p p p p p mmmm 7
7 mmmm p p p p p p p p mmmm 6
S 3 8 mmmmD p p p p p p p p Dmmmm 2 S 4

L

Diſtance of *place*, and *motions* of the body, are a part of the *Art Military*, uſed for the *inſtruction* and *diſciplining foot Souldiers*: whereby to *fit* and enable them, to the *quick*, *true* and *orderly* performance, of all *formes*, and *figures* of *Battell*, as may beſt ſuit with the *time*, *number*, *place*, and *diſcretion* of the *Commander*. And may rightly be divided into theſe *five* generall heads, (viz.) *Diſtance*, *Facings*, *Doublings*, *Countermarches*, and *wheelings*, (which have not unaptly) been compared to the *five vowels*: For as without one or more of the vowels, no word can be ſpelled, ſo without one or more of theſe, neither *forme*, nor *action* can be performed.

Chap. 9. *What is meant by Facing, with the uſe of the word, whether to be uſed or refuſed.*

BEfore we come to ſhew the variety of *Facings* in the action, I think it will not be amiſſe to ſpeak a word or two in the way of *definition*: what is meant by *Facing*? To which I anſwer, That *Facing is a particular turning of the Aſpect from one part to another*, whereby the *Front proper* becomes a *Front accidentall*: And a *Front accidentall*, may be reduced to his *proper Front*. There are ſome ſo ſeemingly curious, that by no means they will allow of the word *Face*: Concluding it altogether unneceſſary; And no other word muſt bee given, but, To the *Right*, to the *left*, &c. Yet I wonder that men will *ſtumble* at ſo ſmall a *ſtraw*, which cannot chuſe but be better uſed then refuſed For the word *Face* is but one ſyllable, and quickly pronounced, and gives ſo cleare an expreſſion of the intent of the *Commander* that it concludes it neceſſary. As for example, Should you command a *Companie* to *double Ranks* to the *right*, and then command them *as they were*, and then ſay, To the *left*, it might *puzzle* a good *Souldier* at the firſt to diſcern whether he ſhould *face* or *double*: The like miſtake might be among *Countermarches*: Wherefore I conceive that none can juſtly taxe it for ſuperfluous, ſeeing the * eaſieſt expreſſion hath alwayes been accounted for the beſt. Yet ſpare me, for my intent is not to overſway any man in his opinion, but rather to deliver mine; leaving all men freely to their own likings.

The word Face neceſſary to bee uſed.

* *The eaſieſt and plaineſt inſtructions are alwaies to be preferred in the teaching young Souldiers.*

If my intent were to make a great Book with a little matter, I might then here inſert *figures* for every particular *Facing*, and their *Redasements* to their *firſt Poſture*, which would take up divers ſheets of paper, and to little purpoſe. For

I ſuppoſe that every man that knowes any thing, may eaſily conceive the *Id* of any ordinary *Facing* in his mind. Wherefore I will ſhew but one or two of the hardeſt. You are to obſerve that for the true performance of *Facings*, every man is to turne upon the *Ball* or *Center* of the *left foot*, and to move from the *ground* onely with the *right*, The *left foot* being the keeper of *Rank* and *File*.

In the exerciſe of the motion of Facings, you are to be at open Order in Rank and File. When you face to any hand in the Reducement, you are to return by the contrarie.

Face to the { Right, Left, Right and left, Right about, Left about } *Face as you were.*

Face to the { Right and left inward, Right, Left } *Angle*, Foure Angles

The *Front-halfe-files* ſtanding, it will bee requiſite for the *halfe-files* to the *Reer*, to doe as much by themſelves: whereby, they will the more aptly perceive, how that the *Subdiviſion* goeth under the denomination of the *Halfe-Files*, &c.

Halfe-files face to the { Right, Left, Right and left, Right, Left } about, Right and left inward } *As you were.*

There is a word which is ordinarily uſed and proper, for *reducements* of *facings*, which is, *To your Leader*.

Face to your Leader, a word of Reducement.

There is another *Facing* alſo ſometimes *Commanded*, which is *Face* to the *Center*, and is moſt proper when the *body ſtands* in ſome *circular forme* or *hollow ſquare*. We have alſo a *Facing* which cauſeth the Body to *face* to the *Front*, *Reer* and *Flanks*, which ſome call, *facing ſquare*.

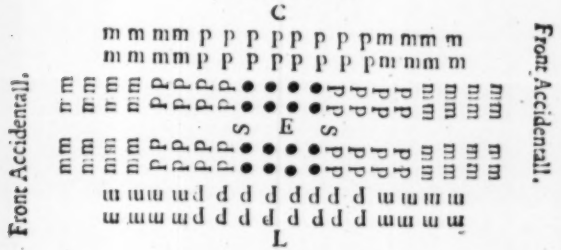
Chap. 10. *Of facing ſquare, and how to performe it, the uſefulneſſe of facings, and the ſeverall parts thereof.*

WHen we inſtruct our *Souldiers* how to *face ſquare*, (if the *Body* bee but eight *deep*) command the two firſt *Ranks ſtand faſt*, the two laſt *Ranks face about*, the reſt of the body *face to the right and left*. If the body bee *deeper*, wee command more *Ranks* to the *Front*, and ſo likewiſe to the *Reer*. It will bee very neceſſary for young *Souldiers* to *move* ten or twelve *paces* upon every *motion* of *facings*, whether they are *entire*, or *diviſionall*. I will now prick two ſeverall *figures* of *facing*, which will bee ſufficient to demonſtrate all the reſt.

The Command is, *Face ſquare and March.*
The Direction is, *Two firſt Ranks ſtand.*
Two laſt Ranks face about.
The reſt of the Body, face to the right and left; (then) *March all.*

Proper

Proper Front.



The Front of the Rear.

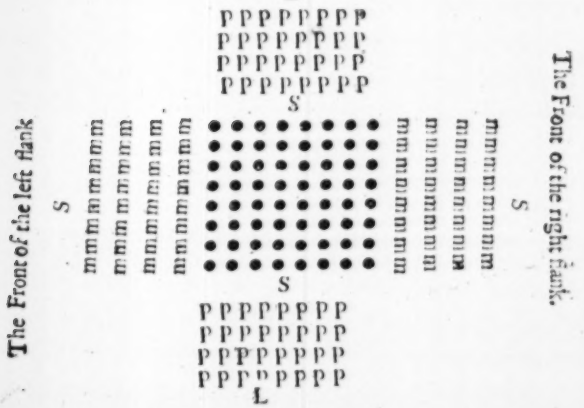
When your *Souldiers* begin any *motion*, let them *advance* their *Pikes*, and *ſhoulder their Muskets*. When they come to a ſtand (and have performed their *direction*) let them *order their Armes* : that is, *to reſt their Muskets*, and *order their Pikes*.

To reduce them to their firſt order. *Face all about to the right*, *march and cloſe your diviſions*. *Face all to your Leader* (*who then ſtands at his front proper*. *Facing ſquare* another way, and *Marching* upon it.

The Command is, *Face ſquare*, and *March*.

The Direction is, *Muskettiers*, *face to the right and left*. (Next) *Halfe-files of Pikes*, *face about to the right*. (Laſt) *March all*.

The Front proper.



The Front of the Rear.

To reduce this *Figure* to its former *Order*, *Face all about to the Right, march and cloſe your Diviſions*

Face all to your Leader, and then they are reduced.

The neceſſity of facings, and how uſefull.

Facings are ſo *uſefull*, and *neceſſarie* that you may as well diſpence with any one of the *grounds* of this *Art*, as with them; for they are *uſefull* almoſt upon all occaſions, and not only ſooner *executed* then any other of the *Motions*, but may be needfull when *Wheelings* and *Countermarches* cannot be uſed, as in a *ſtraight*. There are no more then *foure Facings entire*, beſides *Angular*, but *Diviſionall* there bee divers; and indeed very neceſſary many of them bee, as occaſion may offer it ſelfe for their ſeverall *uſes*; howſoever peremptorily to ſay, there be ſo many and no more, were too reſtrictive; and I conceive hath been concluded by none; but it ſtill reſts at the *diſcretion* of the *Commander*, to *exerciſe* more or fewer of them, as he beſt liketh, and the neceſſity requireth either for *action* or *exerciſe*.

Intire. *Intire facings* are ſo called, when the *aſpect* of the *whole Company* are directed one way.

Diviſionall. *Diviſionall facings* are ſo called, when the *aſpect* of the *Souldiers* are at one and the ſame time *directed divers* and *ſeverall waies*; as to the *front* and *reer*, the *right* and *left*, or to all *four* at once, &c.

Angular. *Angular facings* are ſo called, when the *aſpect* of the Company is directed to the *right corner* Man, which is the *right Angle*, or to the *left Corner* Man, which is the *left Angle*; or to the *foure corner* Men, which are the *four Angles*.

Angular facings were of great repute among the ancients, for their *Figures* called the *Diamond*, the *Wedge*, the *Sheeres*, the *Saw*, and ſuch like, when they made ſuch formes of *Battell*. But in our *moderne Diſcipline*, I conceive them to be of little or no uſe, only thus, wee honour the Memory of the *Ancients* in their practiſe. And ſome ſay they are very fit for *exerciſe*; for that by their uſe the *Souldier* is made more *apt* and *perfect* in the other. Therefore let this ſuffice to be ſpoken concerning *Facings*, and now be pleaſed to turne your *aſpect*, and take a *view* how our *young Souldiers* will behave themſelves in the performance of the *doublings*.

The uſe of Angular Facings.

Chap. 11. *Of Doublings, their uſe and parts.*

Doublings are to moſt excellent and ſingular good uſe for the *ſtrengthening* of any part of the *Battell*, according to the occaſion or diſcretion of the Commander, and *conſiſts* of theſe *two generals*; *Doublings* of *length*, and *Doublings* of *depth*, all times in *quantitie* of *number*, ſometimes both in *number* and *place* both having this *reſtriction*, to be *doublings* of *ranks* or *flanks*. Every particular *doubling* proceeding at one of theſe, although there be ſundry and divers wayes for doing of them, each of them being to very good purpoſe, for ſome conſideration or other.

* *Doublings of ranks alwaies extending the length, either in number, or place, or both.*

Doublings of *ranks*, from what forme ſoever it be done doth make the *number double* ſo much as it was before, and ſometimes doth *extend* the *length* of the *Battell* to *double* the proportion of *ground* as well as *number*.

* *Doublings*

* *Doublings* of *files* (or *ſtanks*) do alſo *double* the *number* in *depth*, and ſometimes becomes a *doubling* both of *number* and *place*. Wherefore for the better underſtanding of *doublings*, obſerve with me theſe *ſix* uſuall waies following.

* *Doublings of files or ſtanks*) *always extending the depth, either in Number or Place, or both.*

The ſeverall parts or branches of Doublings.

Doublings of
- Ranks. 1
- Half-Files. 2
- Bringers-up. 3
- The Reere. 4
- Files. 5
- Half-Ranks. 6

The firſt is the *doubling* of *Ranks*, and is when every *even Ranke doubleth into odde*. The ſecond is, when *halfe files double their ranks forwards into the front*. The third, when the *Bringers-up double their ranks forwads into the front*. The fourth, when the *ſame half-files doubleth the Reer*. Theſe firſt four being *doublings* of *ranks* the *length* of the *Battell* being by them *extended* either *ſimply* in *number*, or both in *number* and *place*. The next two are *Doublings* of *ſtanks*; the firſt whereof is the ordinary *Doublings* of *files*, every one of the *even files* being inſerted into the *odde files*, accounting from the hand named. The next is, the *doubling* of *halfe ranks*, which is to be underſtood when one *ſtank doubleth* the *other*, either by *paſſing through*, *countermarch*, *doubling entire*, or *diviſionall*.

Note, that the diſtance for particle, and diviſionall doublings is open Order in rank and file.

You are to note in this *motion* of *doubling*, that as there is one part of the *body ſtands* ſo the other part *moves*; the *ſtanding part* is to be *doubled*, the *part moving* are thoſe that *double*, as you may perceive by the *Figures*, which ſhew the manner of each *doubling*. That which next followes are the words of *Command* and *direction* for *Doublings*, with their ſeverall *reducements* following next after them.

Note alſo, that the ordinary doublings of rankes and files is or ought to be performed by three ſteps, firſt ſtepping forth with that foot which is next unto the place named, and in the reducement, to returne by the contrary hand.

The words of Command for Doublings, with the Reducements.

Ranks to the {Right / Left} double { *Ranks as you were.*

Files to the {Right / Left} double { *Files as you were.*

Bringers up, double your Ranks forward to the right.
Bringers up face about to the left, march forth into your places.

Bringers up, double your ranks forward to the left.
Bringers up face about to the right, march forth into your places.

Files to the right {outward. / and left double {inward, } *Files as you were.*

Half-files double your ranks forward to the right.
Half-files face about to the left, march forth into your places.

Half-files double your ranks forward to the left.
Half-files face about to the right, march forth into your places.

Note that in doublings of ranks and files, if you double ranks to either hand, doubling of files to the contrary, reduceth them. Or in doubling of files to any hand, doubling of ranks to the contrary will reduce them.

Front half-files face about to the left } and double the reer to the right.
March forth into your places.

Front half-files face about to the right } and double the reere to the left.
March forth into your places

Front half-files countermarch to the right } and double the reer.

Front half-files countermarch to the left.

The word of Reducement for either, is, *Front halfe files as you were.*

Half-ranks to the right, by countermarch double your left flanke.
Half-ranks that doubled face to the right, march forth into your places.

Half-ranks to the left by countermarch double your right flanke.
Half ranks that doubled face to the left, march forth into your places.

Half ranks of the right, double your left flank.
Half ranks that doubled, face to the right, march forth into your places.

Half-ranks of the left, double your right flank.
Half-ranks that doubled face to the left, march forth into your places.

Half-files double your front to the right intire.
Half-files face about to the left, march forth into your places.

Half-files double your front to the left intire.
Half files face about to the right, march forth into your places.

Half-files double your front inward in ire.
Half files face about to the right, march forth into your places.

Note that upon all motions of doublings, that they who are to double, before they move from their places, are to advance their Pikes and ſhoulder their Muskets. When they have performed their doubling, they are to conforme to

Half-files double your front by diviſion.
Half-files face about to the right and left inward, march forth into your places.

Front half-files double your reer by diviſion.
Front half-files face about to the right and left inward, march forth into your places.

Front half-files, double your reer to the right intire.
Front half-files face about to the left, march forth into your places.

Front half-files, double your reer to the left intire.
Front half-files face about to the right, march forth into your places.

Half-ranks of the right, double your left flank intire, advancing.
Half ranks that doubled, face to the right march forth and take your places.

Half-ranks of the left, double your right flank intire advancing.
Half-ranks that doubled, face to the left, march forth and take your places.

Half-ranks of the right, double your left flanke by diviſion.
Half-ranks that doubled, face about to the right, march forth into your places.

Double your ranks to the right intire.
Ranks that doubled face to the left, and march into your places.

Double your ranks to the left intire.
Ranks that doubled face to the right, and march into your places.

Double your ranks by diviſion.
Ranks that doubled, face to the right and left inward, and march into your places.

Double your files to the right intire, advancing.

the poſture of thoſe whom they double, whether it be Order, Advance, or ſhoulder. Note that all intire doublings are to be performed at Order both in Ranke and File.

Files

Files that doubled face about to the left, march downe into your places.

Double your files to the left intire, advancing.

Files that doubled, face about to the right, march downe into your places.

Files double your depth intire to the { right. left. } * *Files that doubled, as you were.*

Files double your depth to the right, every man falling behind his bringer up.

Files that doubled, as you were.

Files double your depth to the left, every man falling behind his bringer up.

Files that doubled, as you were.

* *Or it may be reduced to halfe files that now are double your ranks forward to the contrary hand.*

Chap. 12. *Of Inversion, and Conversion, and of doubling Ranks.*

THere is yet another *doubling* of the *depth*, which is called *Inversion*. But because some out of their *ignorance* make little or no difference betwixt *Inversion* and *Conversion*, give me leave for the cleering of the doubt to place *Conversion* and *Inversion* together, that by their contrary *effects* the difference may be the more *perspicuous* to such as shall desire to know them. Yet before I either enter upon *Figure* or *Command*, for *Inversion* and *Conversion*, I hold it necessary to shew some of the *Figures* of those *Doublings*, for which I have already given the words of *Command* and *Reducements*. And then next after them, I will place both the words of *Command*, and the *Figures* belonging to *Inversion* and *Conversion*.

This *Figure* next following is a *Doubling* of *ranks* to the *right*, where you may perceive how the *even Ranks* are *inserted* into the *odde ranks*: the *prickes denoting* the *places* they *stood in*, before the *Doubling began*, the *little line*, or *stroke* drawne for the *pricks*, shewing the manner of the *doubling*: I thinke it would be needlesse to make another *figure* to shew the *doubling* of *ranks* to the left, for the meanest judgment may by this *figure* easily apprehend what the other would be.

Note that in the douling of ranks, the even ranks are to double into the odde, beginning alwaies to rekon from the first rank.

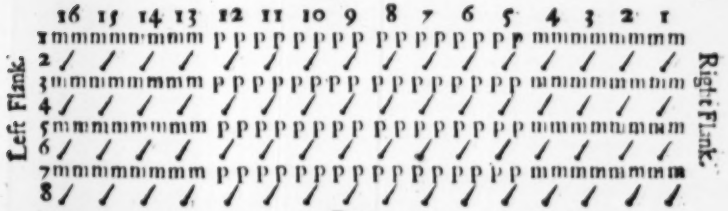
The Command is, *Ranks to the Right double.*

The Direction is, *Every even rank move at three steps into the odde.*

Front.

	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	m
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Left Flank. Right Flank.



Reer.

Ranks as you were, or *Files to the Left double.*

Chap.

Chap. 13. *Doubling of Files.*

IN *Doubling* of *files* ever obſerve this *rule*, that the *even files* are to be *inſerted* into the *odde files*; alwayes beginning from the *hand named*: as for example in this preſent *doubling* of *files*, the *left hand file ſtands faſt*, the ſecond *file doubleth* into it, the *fourth file* into the *third*, and ſo for the reſt. If your command be to *double* your *files* to the *right*, then contrariwiſe the *right hand file ſtands faſt* the reſt of the *even files doubling into the odde*, accounting from the *right*, as before from the *left*. Thus much may ſuffice for the *doubling* of *files*: onely take this by way of admonition; that as in *doubling* of *ranks* any way, you are to obſerve your *right hand Leader*: ſo in *doubling* of *files*, you are to obſerve your *file-leader*; ſo that as neare as poſſibly may may bee, you either in *rank* or *file*, bee altogether in one *motion*. If you pleaſe further to obſerve with me, that this *doubling* is a *doubling* of *Number*, and not of *Place*, the *depth* of the *Battell* not being thereby *extended*, for further ſatisfaction obſerve this *Figure*.

In doubling of files note if the doubling be to the left, as in this figure, then every man of the even files ſteps behind his left hand man at three ſteps, every even file doubling into the odde files, alwayes beginning to account with the outmoſt file to the hand named, as I have formerly ſaid. In this doubling of Ranks by bringers up, as likewiſe in all other of like nature, they that are to move, are to advance their Pikes. But if the Commander pleaſe, it will bee beſt for the eaſe of the Muſquettiers to bee ſhouldred, And upon all doubling of Ranks whatſoever, let them bee ſure to obſerve their right handmen.

The Command is, *Files to the left, double.*

The Direction is, *Every even file from the left, at three ſteps move into the odde*

Front.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/	
	m		m		p		p		p		p		m		m		
2	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/	
	m		m		p		p		p		p		m		m		
3	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/	
	m		m		p		p		p		p		m		m		
4	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/	
	m		m		p		p		p		p		m		m		
5	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/	
	m		m		p		p		p		p		m		m		
6	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/	
	m		m		p		p		p		p		m		m		
7	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/	
	m		m		p		p		p		p		m		m		
8	m	/	m	/	p	/	p	/	p	/	p	/	m	/	m	/	
	m		m		p		p		p		p		m		m		

Left Flank. Right Flank.

Reeer.

The Reducement, *Files as you were*; or, *Ranks to the Right double.*

Chap.

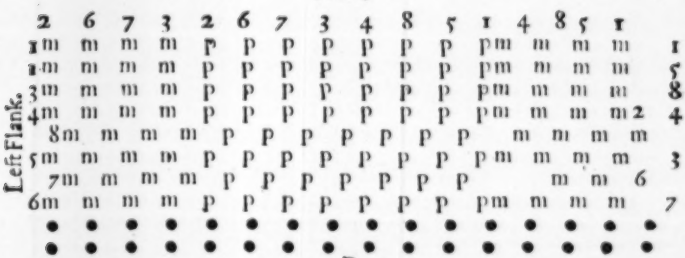
Chap. 14. *Of doublings by bringers up.*

THe *doubling* which next followeth, ſhall be a *doubling* by *Bringers up*, of which ſort, one *figure* will be ſufficient, which I hold moſt neceſſary to demonſtrate in manner of *motion*, the *Command* and *Figure* followeth.

The Command is, *Bringers up, double your Ranks forward to the right.*

The Direction is, *The laſt Rank paſſe forward to the right, and Rank even with the Front, the reſt following ſucceſſively.*

Front.



Reer.

The Reducement.

Bringers up Face about to the left, March forth into your places.

This *doubling of ranks by Bringers up*, differeth from the other *doubling of ranks* which I firſt ſhewed; not onely in regard of the *diſtance* betweene the *ranks* and *quantitie of ground*: but alſo in the *dignitie* of the *doublers*.

Firſt it differeth in *place*, the former leaving *larger diſtance* between *rank* and *rank*, being *double* that *diſtance*, they formerly *ſtood at*: this to the contrary continuing and preſerving the *diſtance* they firſt had betweene *each rank*, and leaving all that ground the *halfe-files formerly occupied*, as you may in part perceive by the *little pricks* at the bottome of the *figure*.

It differeth alſo in *dignitie*, bringing the *beſt*, and *ſecond* ſort of *ſouldiers* together into the *Front*: the other producing the *fift rank in dignitie, to be doubled into the firſt, &c.* The manner of the *doubling* you may plainly perceive by the *figure*, the *Motion* of this *doubling*, and way to performe it, is as followeth. The *right* or laſt *rank*, which are the *bringers up*, paſſe forwards *even* in *rank*, through or *between* the *intervales*, to the *right* of them that ſtand before them, untill they come *even* in *rank* with the *Front*; The *ſeventh rank* following thoſe which *marched* from behind them, placing themſelves in the *ſecond ranke*, the *ſixth* in the *third*, the *fifth ranke*, or *halfe-file* in the *fourth* or *reere* of the *front-halfe-file*. This *doubling* maketh a very able *front*, in bringing all the beſt *ſouldiers* together. And although it hath *diminiſhed* the *number*, in regard of the *depth*, yet it hath *doubled* the *number* in the *length*. This *doubling*, is in *quantitie* of *number*; not of *ground*. When you reduce them into *their places*, remember this, that the

This doubling a great ſtrengthening to the Front.

rank which laſt took his *place* in the execution of this *Motion*, muſt *firſt march* into his place in the way of *reducement*. For as they are led on by their *bringers up*, conontrariwiſe they are led off by their *halfe-file leaders*.

In the *doubling* of the *Front* to the *left* by *bringers up*, it is the ſame, onely by differing in the hand. Wherefore let this ſuffice for *doubling* by *bringers up*.

Chap. 15. *Doublings of files outward and inward.*

THe next *doubling*, is a doubling of *files outward*, which works the ſame effect; as to *double files* to t e *right* and *left*. For the *right flank* is to *double* to the *right*, the *left flank* to the *left*. As you may plainly perceive by the following *figure*.

The Command is, *Files to the right and left double outward.*

The Direction is, *The outmoſt files of each flank ſtand, the even files from each flank double into the odde.*

Files as you were.

This *doubling* of *files* to the *right* and *left outward*, ſtrengthneth both the *flanks*, at once; by doubling their *numbers* in *depth*: But it *weakneth* the *inward part* where it taketh *two files* cleane away, leaving a *large intervale* in the *midſt*. Some ſay it is good when a *Commander* will grace any, to bring them through the *center* or *midſt* of the *Batta'ia*. But you muſt note, if you have an odde *file* you cannot ſo punctually performe it, as when the *number* of your *files be even*. The manner of the *doubling*, you may perceive by the *figure*; the *motion*, by the *little lines* drawne from the Pricks: the performance is as followeth.

The outmoſt *file* of each *flank ſtands*; the ſecond *file double into them*; the third *file* from each *flank ſtand*; the fourth *files* double into the third; the fift into the fifth, and ſo likewiſe for the reſt.

I

If you would *double files* to the *right* and *left inward*, it is to be done the contrary way: For whereas in this *Figure* of doubling laſt performed, the outmoſt *files ſtand*, the other doubling *outward*, into them: Contrariwiſe the two inmoſt *files* ſhould *ſtand*, the reſt doubling to them *inward*. And whereas in this there is a *larger diſtance* in the *midſt*, then is in any other part; the other part *contra* would be cleſſe in that part. Some men doe not approve of either of theſe doublings. I leave every man to his owne choice. The *practiſe* tends to *perfection*, and he that can doe much may doe leſſe when he liſteth. *Doubling files to the right and left inward.*

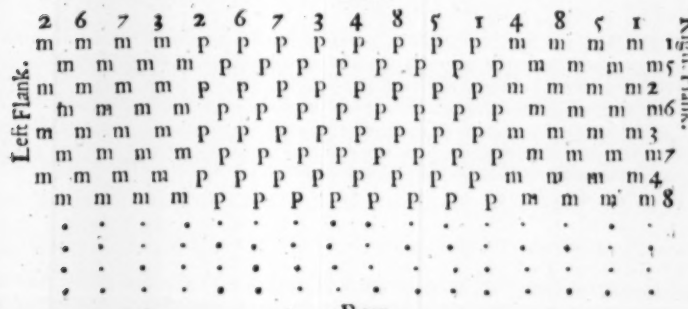
Chap. 16. *Of doubling by halfe-files.*

THe next Doubling is a *doubling* by *halfe files*, whereby the *length* of the *Battell* is extended to *double* the former proportion of *number*, the *depth* being extenuated both in *number* and *place*. This *Figure* will demonſtrate unto you the manner of the *motion*, which is as followeth.

The Command is, *Halfe-files double your Ranks forward to the right.*

The Direction is, *Halfe file-leaders paſſe forwards to the right unto the Front, the reſt of the Ranks following ſucceſſively.*

Front.



Reer.

Half-files face about to the left, march forth into your place.

Doubling by halfe-files, by the Greeks called Parembole, *or inſertion.* Tact. Ælian. 31 &c. *Doubling by halfe-files makes the Front, to precede the Reere by one third.*

*This *Doubling* our *ranks forwards* by the *Halfe-files*, is a *Motion* generally approved of by all for ſervice able, if it be done with conveniency. It differeth from the other doubling by *Bringers up*, in *quality*, not in *quantity*, (for therein they keep one proporion: In quality it differeth thus: *The doubling by bringers up* brought the beſt and ſecond ſort of ſouldiers together into the *Front*: the fourth and third ſort into the *Reer*: So that the *Reer* was worſe then the *Front*, a ſeventh of foure; this doubling by *halfe-files* brings the beſt and the third together into he *Front*, and leaves the ſecond and fourth in the *Reer*: ſo that the *Front* is made more able then the *Reere* by a third. It differeth likewiſe in *Motion*; For whereas in the other doubling, by *Bringers up* the *Motion* was begunne, by the laſt *ranke*, every *Ranke* following the *Ranke* which

came from behinde them; this contrariwiſe is directly led forth by the fifth *Ranke* from the *Front* (if they bee *eight deep*) and ſo is executed more ſurely and ſuddenly; the fifth *rank* paſſing into the firſt, the ſixt *rank* into the ſecond, the ſeventh into the third, and ſo for the reſt. For the *reducement*, when they are commanded to *face about to the left, and march forth into their places*; then as the *Motion* was led on by the *Halfe-file Leaders*, ſo in the *reducement*, they are led off by the *Bringers up*: Doubling of *halfe-files* to the left produceth the ſame effect, only the contrary hand.

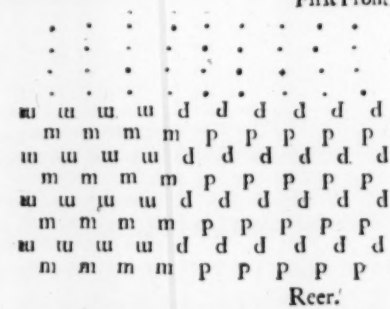
Chap. 17. *Of doubling the Reer by Front-halfe-files.*

In the reducement of the doubling the Bringers up are the Leaders of the motion.

THe doubling of the *Reer* by *Front-halfe-files*, is differing from the doubling laſt ſhewn, more in *manner* then *matter*; Both concurring in ſubſtance, although differing in circumſtance. To ſay more of it, were more then needed; only peruſe the *figure* which preſents it ſelf unto you (as it is in *motion*.)

The Command is, *Front-halfe-files, double your Reer to the right.*

The Direction is, *Front-halfe-files face to the Reer, and march down even to the laſt Rank.*



Front-halfe-files, face about to the left, march forth into your places.

This doubling of the *Reer*, by the *Front-halfe-files*, is to bee performed after this manner. The Command being firſt given) the *Front-halfe-files face about to the left*, the *Pikes* being all *advanced*, the *Muskets* all either *poyſed* or *ſhouldred*) and ſo being *led* by the *Halfe-file-leaders* to the *Reer*, which are thoſe that hold the fourth place of honour, they *march directly towards* to the *left* of the other part of the body, which ſtood *faced* in oppoſition; untill the *leaders* of the doubling have *ranked* even in *rank* with the *bringers up*, the reſt *ranking even* with the other *ſtanding ranks*, according to their *places*: If it be for *ſervice* that this doubling is uſed, then the whole body is to *face about* to the *Reer*, being the *part* to be doubled: If only for *exerciſe*, then the *Commander* may (if he pleaſe) keep his *place*, and the doubling performed, *face* the whole body to the *Leader*, and command for the *Reducement*; *Files to the right, double intire advancing*; which *reduceth* each man to his firſt *place*.

The Rank which holds the fourth place of honour are Leaders of the motion.

Chap.

Chap. 18. *Of Doubling the Reere by Counter-march.*

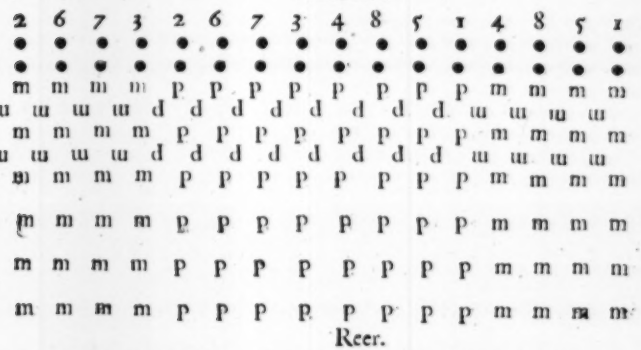
THere is another manner of Doubling of the Reere, by the Front halfe-files, contrary to that ſhewne in the precedent Chapter, which is done by way of the *Lacedemon Counter-march*, which ſome would ranke amongſt the *Counter-marches*; becauſe (ſay they) the Motion is a *Counter-march*. But the *act intended*, or thing wrought, is a *doubling*; and if it were to have the denomination of a *Counter-march*, then it ought not to mixe with any other part of the *body*, only to *counter-march the front into the midſt*, and there to ſtand, without paſſing forward to the Reere; (which makes it a *doubling*) and then it might be accounted for a * *part counter-march*. But as it is here commanded and performed, it is a *Doubling*. Obſerve the *Command* and *Figure* following.

* A part-Counter-march is when one Moity or part of the body counter-marcheth, thereby not altering the number of the length or depth of the Figure, but only transferring one part into another. It is at the diſcretion of the Commander, to face the Company which way he pleaſeth, either for Motion or reducemen. of any Motion formerly performed.

The Command is, *Front half-files, Counter-march to the left, and double the Reere.*

The Direction is, *Reere half-files, Face to the reer and ſtand; the reſt Counter-march to the left, and loſe ground.*

First Front.



Reer.

Front half-files face about to the Left, march forth into your places.

This doubling of the *Reer* by *counter-march*, produceth the ſame effect to the *Reer*, as *doubling the Front by Bringers up doth unto the Front*. The *Counter-march* by which it is performed, is *a counter-march of loſſe of ground*: we will ſpeak

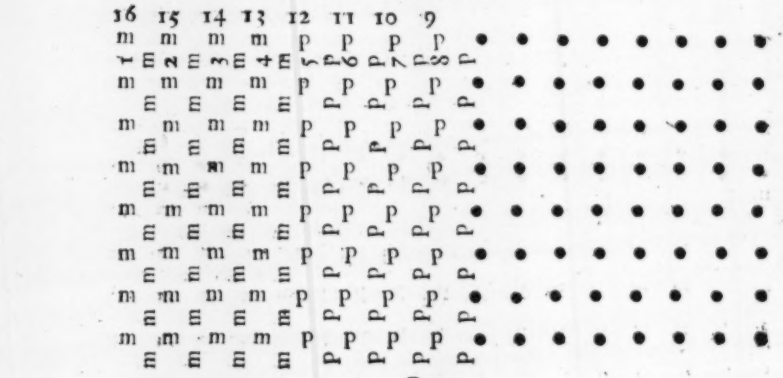
more of it amongſt the *Counter-marches.* The Command to reduce it is (if the Commander ſtand at the head of that part that is Doubled.) *Front half files, face about to the left, march forth into your places.* If he keep his firſt ſtand, having faced them to him; Then, *Front half-files, march forth into your places.* To double the Reere to the Left by *counter-march* is the ſame, differing onely in the hand. I will next ſhew a *doubling of the left Flanke* by way of *counter-march.*

Chap. 19. *Of Doubling Flanks by way of Counter-march.*

Half ranks (or *Flanks*) are then ſaid to be *doubled, when the depth of your* Battalia *is increaſed to double, their former proportion of Number or Place,* (or both which may be done divers wayes. But this Chapter and *Figure* is onely to demonſtrate unto you the *doubling of the left flanke by way of Counter-march.* The *Figure* followeth, as the *doubling* is in motion.

The Command is, *Half-ranks to the right by Counter-march, double your left flanke,*

The Direction is, *Face to the Right, and Counter-march to loſe ground.*



Half-ranks that doubled, face to the right. March forth into your places.

This doubling of *Half-ranks* by *Countermarch*, is a doubling of *Number*, not of *Place*; for the *depth* ſtill retaines the ſame proportion in quantity of *ground*, onely augmented by one man, the *length* of your *Battalia* being diminiſhed both in *Number* and *Place*, the *right flank* being wholly inſerted into the *left flanke*, as you may perceive by the *Figure*; the Motion is to be performed on this manner, the *half-ranks* of the *right, face to the right*, and then *even in ranks together, countermarch between the interwals, untill the outmoſt file to the right*, which

is

is marked with the figure 1. become into the outmoſt *File* of the *left Flanke*, which is marked with the number 16. the ſecond into the fifteenth, the third into the fourteenth, the fourth into the thirteenth, and the reſt in like manner. The uſe of this doubling is, to ſtrengthen one of the *flanks* by bringing more hands to do preſent execution, the other *flank* being in more ſurety. The way for the *Reducement* of this Motion is after this manner; *The half-ranks that doubled being faced to the right*, then they which were laſt in taking their *places* in the *Motion* now are the firſt which take their places in the *reducement*, orderly marching in *rank* together, untill they come to their *places*; then *facing* to their *leader*, they become *Files* againe. The *left flank* may in like manner *double the right by counter-march*; the difference is this, the *right flank ſtands*, the *left flank is inſerted into the right*, as before the *right was into the left*. To ſhew another *figure* for it, would be altogether needleſſe.

The uſe of this firing. Obſerve the manner of the Reducement.

Chap. 20. *Doubling half-files to the right intire to accommodate the doubling of half-ranks.*

I Should now come to ſhew another manner of *doubling* of *flanks*, by *inſerting* the one *flank* into the other, a different way from that laſt ſhewne. But if I ſhould performe it as the body ſtands in the ordinary *ſquare* flanked with *Muſkettiers*, then it would produce a mixture of Armes. To avoid which, before you enter upon this *doubling*, of *paſſing in, through* or *betweene* your *half-ranks*, Cauſe your *half-files to double the Front to the right intire*, which being performed, you may then proceed to the doubling of your *flanks* any way without mixture of *Armes*. If I ſhould have ſhewn this motion with *Pikes* or *Muſkettiers* alone, this firſt doubling of *half-files intire* might have been ſpared, but I deſire not to leave any thing obſcure or difficult, but to render it as eaſie and apparant as I may to the capacity of the meaneſt Reader, and if any place in this ſmall Treatiſe of mine ſhall ſeeme ambiguous, I ſhall intreat the courteous to impute it to my lack of language to expreſſe my ſelfe, rather than any will in me to conceale or obnubilate the ſenſe, whereby to deprive them of the true meaning of any thing in this Booke contained. But leſt by *doubling of words*, I prove tardy in my worke, I will forbear further circumſtance and come to the proſecution of the matter, which in the firſt place will be a *Doubling of half-files to the right intire*, whereby the next doubling may be the more commodiouſly accompliſhed. The *figure* followeth.

The Command is, *Half files double your front to the right intire.*

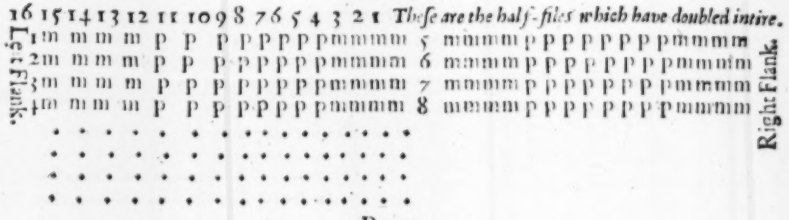
The Diviſion is, *Half-files face to the right and march.*

Face to your Leader.

March up and even your Front.

Front.

Front.



Reere.

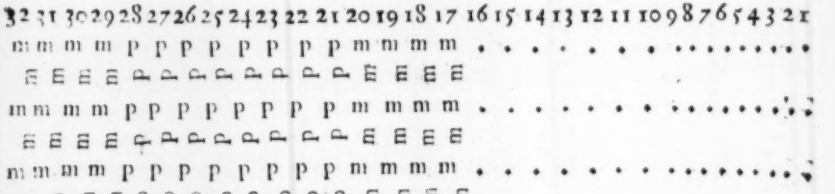
This *doubling of halfe-files to the right intire*, I have fully expreſt in the *figure*, as the Body ſtands, the Motion being ended, becauſe we are to adde another *doubling* before we reduce them. This *figure next following* will bee beſt ſhewn in the Motion (or action) not fully performed: that thereby the manner may be the more eaſily diſcerned. But by the way obſerve, that this Doubling of *half-files is a doubling both of number and place*, for the *length* of the *Battalia* is not onely *double ſo many a-breſt as they were before*, but they alſo have *extended* their *length* to *double* their proportion of *ground* which formerly they did occupy. I forbeare to ſpeake more of this Doubling untill wee come to ſhew it in Motion, and now proceed to the next *doubling* upon this.

All intire doublings are doublings both of number and place.

The Command is, *Half-ranks of the right, double your left flanke.*

The Direction is, *Half-ranks of the right, face to the left and march, face to your Leader.*

Front.



Reere.

Half-ranks that doubled, face to the right, march forth into your places.

This *doubling of half ranks* is a more ſpeedy and ſure *doubling* then the *doubling of half ranks by Counter-march*; notwithſtanding, it is moſt commonly uſed when

when the Body conſiſts but of one ſort of *Armes*, being either all *Muſkettiers* or all *Pikes*. Nevertheleſſe, becauſe in my *Figures* I have as well *Muſkettiers* as *Pikes*, I have made uſe of a *doubling* by *half-files intire*, and from that have doubled my *left flank*, ſo to prevent the mixture of Armes. ‡ However mixture of Armes upon ſome occaſion may be neceſſary. The manner to performe the motion is this, the *left flank ſtands*, the *half ranks* of the *right*, *face* to the *left*, and then the inmoſt *file* of the *right flank* (all the files of the right flank being, by this facing become ranks) is the *leader* of this *motion*, marching forth directly to their *left hands* betweene the *Intervals* of the *Ranks* of the *left flank*, untill that the ſixteenth *file* which now is become a *rank* hath placed it ſelfe orderly in the two and thirtieth *file*, (which is the outmoſt file of the left flank.) The fifteenth in the one and thirtieth, the fourteenth in the thirtieth, the thirteenth in the nine and twentieth, and ſo likewiſe of all the reſt. The places may be perceived by the *Figure*; the doubling is of *number*, and not of *place*. * For reducement to both theſe doublings, firſt cauſe the *half ranks* which laſt doubled to *face* to the *right*, and ſo march into their *places*: they that *laſt* took their *places* in the *Motion*, are the *firſt* that take their *places* in the *Reducement*; the doubling of *half ranks* being thus reduced: next for the reducing of the *half files*, (which were * doubled before for the accommodating of the doubling of *half ranks*) command the *half-files to face about to the left*, and to *march forth into their places*; wherewith I will conclude theſe ſorts of Doublings, which require *open order in Rank and File*, and come next to ſhew *intire doublings*, which claim a cloſer diſtance for their true performance. And therefore conceive them cloſed to their ‡ *order* both in *Rank* and *File*.

‡ *Mixture of Armes at ſome time may be neceſſary.*

* *The Reducements to both theſe doublings and firſt to reduce the doubling of the left Flank.*

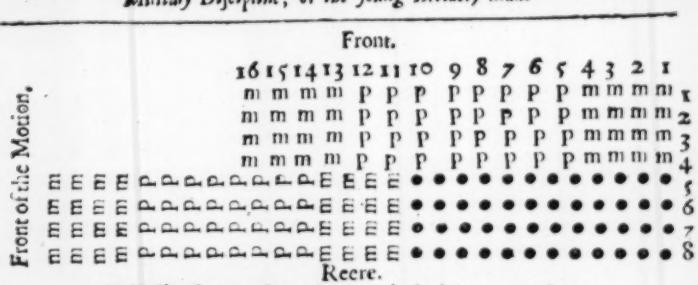
* *The doubling of half files to the right intire reduced.* ‡ *Order both in Rank and File: the true diſtance required for intire Doublings.*

Chap. 21. *The difference betweene intire and diviſionall doublings, and of doubling half-files intire.*

HAving cloſed our Souldiers to their due diſtance, I will next proceed to ſhew *doublings intire*. But me-thinks I heare ſome already inquiring what is meant by *intire doublings*, and therefore without offence to the curious, give me leave to be ſo courteous to tell them, that all Doublings are either *intire* or *diviſionall*: *Intire doublings* being theſe, or ſuch like, as when the *files* or *half-files*, *ranks* or *half-ranks*, (according as the command ſhall be given) doe march forth *jointly together* without *diviſion* or *diſſipation* to double the part *commanded*. *Particle* and *diviſionall Doublings* being ſuch as I have formerly ſhewn, as when the *files* or *half-files*, *ranks* or *half-ranks* are *diſranked* and *divided* into more *parts* or *places* then one. This may ſerve for way of diſtinction; I will now ſhew *intire doublings* as they are in action, and firſt begin with *doubling half files*. The *Figure* followeth.

What intire doublings are. What is meant by Particle and diviſionall doublings.

The Command is, *Half-files double your front to the left intire.*
The Direction is, *Half-files, face to the left and march.*
Face to your Leader.
March up and even your front.



Half-files face to the right, march forth into your places.

Doubling by half files intire, a ſerviceable doubling.

This *doubling* of *half-files intire* hath been held a better *doubling* then either the ordinary doubling of *Ranks*, or the uſuall way of doubling by *half-files* or *bringers up*; ſome of the cauſes are theſe. Firſt it makes no diſturbance to the other part of the *Battalia*; but that it may either be executed in time of *motion, exerciſe*, or *skirmiſh*. Secondly, it appeares another *ſolid body*, to the great diſhearting of any Enemy. Thirdly, it is very apt for *over-fronting*, being a doubling both of *number* and *place*. That it hath beene uſed by antiquity, take one example out of "*Polibyus*: • *Philopemen* the Achaian Generall having "ranged his *Battalias* in forme *Plagiophalanx*, the Lacedemonian *Machanidas* "being to confront him, marcht up directly oppoſite to his *right wing* in forme "of a *Herſe*, (by them called *Orthophalanx*) but being come within convenient "diſtance, he ſuddenly cauſeth the *Reere half-files* to *double* the *Front to the right* "*intire*, thereby equalizing the *left wing* of the Achaians. The manner or way to performe the Motion is this; the *half-files face to the left, and march till they are quite clear of that part of the body which ſtands, then they face to their leader, and ſo march up untill they are become even in Rank with thoſe which ſtand upon the right flanke*, and then the *Figure* will be perfect. For the *Reducement*; the word of Command is, *half-files face about to the right, march forth into your places*, having faced about, they march ſtraight forth untill they be clear of the *front half files*, then they *face to the left*, and march ſtraight forth un ill every man hath his right place, and then face right after their *Leaders*. The doubling of *half-files to the right intire*, is performed after the ſame manner, only differing in the hand.

• *Polybius l.1.p.631. B. as alſo Ælian in his Tactics, the notes of the 32. cap.*

The direction for this doubling of half-files intire.

The word of Command and reducement of this doubling.

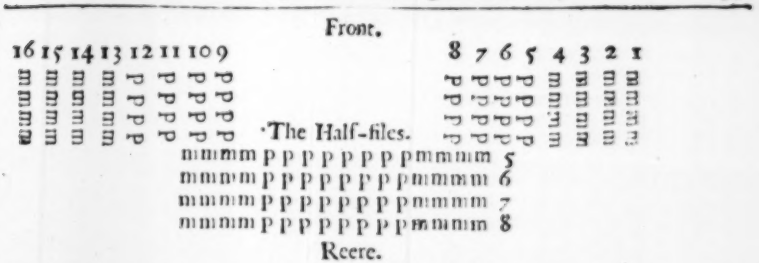
Chap. 22. *Of doubling the Front inward intire.*

Doubling of the *Front inward intire*, hath beene a Doubling as uſefull as ancient; notwithſtanding, moſt commonly uſed by greater bodies, as when one *Regiment, Diviſion*, or *Maniple moveth forward between two others*, thereby *ſeconding* or *relieving them*, whereby the *Front* of all the *three diviſions* become *ranged* in an even line; but I have only taken upon me to ſhew the Motion in a private Company. The *Figure* whereof followeth as it is in the execution.

The Command is, *Half-files, double your front inward intire.*

The Direction is, *Front half-files, face to the right and left, and march, ſtand, and face to your leader. Reer half-files, march up and even your front.*

Front,



Half-files, face about, and march. Front half-files cloſe your diviſion. Face all to your Leader.

It hath beene the cuſtome amongſt ancient Souldiers and great Commanders, that in the matter of *Exerciſe* they ſhew ſome things which are moſt apt for a private Company, ſome for a Regiment, otherſome moſt uſefull for compleat Armies; ſo in like manner, it muſt be the diſcretion of every Reader, (whether he read for apprehention or reprehenſion) to ſuit and fit each Motion to his true end and purpoſe, and with the wiſe man, *rather read twice, then judge once*; and then perhaps, when the intent of the Author is perceived, his opinions may be received; yet what need I, or any other, apologize ought in the behalfe of this Forme, or any other ſuch like; ſith they are but the expreſſions of the various *Figures* which proceed of the words of Command, uſed (almoſt) by every ordinary Exerciſer of a Foot Company? Nevertheleſſe, if *Eſops* long ear'd beaſt paſſing by ſhould peepe into this *Druggiſts ſhop* and quarrell with the Compounds, I ſhall not ſtudy for a further anſwer, than *That the excellent and skilfull Phyſitian can convert that into an Antidote, which the unlearned foole will make no Poſon.* But leaſt I be tax'd for digreſſion, the Motion of this Doubling is thus performed, *The half-files of the Front faceth to the right and left, and march till they have left a diſtance betweene them ſufficient to receive the half-files* of the *Reere*, then *ſtand and face to their Leader*; that done, the *half-files march up and even their Front.* For the *Reducement* of this *figure*, there are (as for all the reſt) divers wayes, but becauſe that it is neceſſary to ſhew one, let the *half-files face about to the Reer*, and *march* untill they are *clear of the front half-files*, then cauſe them to *ſtand and face to their Leader*; that being performed, command the *Front half-files to cloſe their diviſions*, and they are rightly *Reduced* at at firſt.

The manner or way how this doubling ought to be performed.

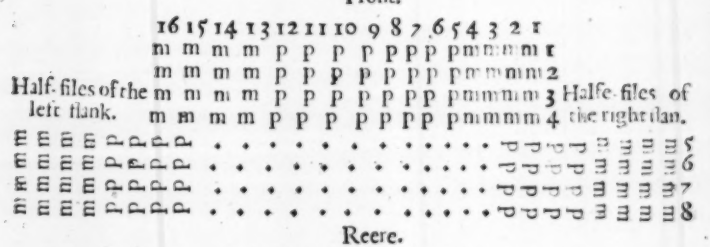
The Reducement.

Chap. 23. *Of half-files doubling the Front by Diviſion.*

THis *Doubling* hath beene very well approved of by Count *Mansfield*, Sir *Thomas Kelly*, Captaine *Bingham*, and divers other moderne Souldiers of good eſteeme, who preferre theſe ſorts of *Doublings* before any other, becauſe theſe *Doublings* may be uſed in time of Fight, without diſturbance to the other part of the Battell. The *Figure* ſtands as it is in Motion.

The Command is, *Half-files double your Front by Diviſion.*

The Direction is, *Half files face to the right and left, and march. Stand: Face to your Leader, march up and even your front.*



Half-files about inward. March forth into your places.

The manner or way how this doubling ought to be performed. The Reducement.

The way to performe this Motion is as followeth; the *half-files* are to *face* to the *right* and *left*, and to march untill they are cleer of the Reere; part of the *front division*, then they *face* to their Leader and march up untill they become even in rank with the *front*, and so ſtand, which perfects this *doubling*. The way to reduce them is as followeth; the *half-files* are to *face* about to the *Reere*, and to march forth-right, untill they are cleer of the *front half-files*, and then they are to *face* to the *Right* and *Left* inward, and so to march and cloſe their *Diviſion*; then being *faced* to their Leader, they are *reduced* as at firſt.

Chap. 24. *Of Doubling the Reere by Diviſion.*

THis next Doubling ſhall be a *doubling* of the *Reere* by the *Front half-files*, which will work the ſame effect to the *Reer*, as the laſt *doubling* by *diviſion* did the *Front*. It may be uſefull in the paſſing of a River when the enemy chargeth or purſueth the *Reer*. The *Front diviſion either opening*, as you may perceive by the *figure* (next following) and ſuffering the *reer half-files* to paſſe through them, they maintaining the *Skirmiſh* untill the other have attained the further bank of the River, or elſe the *Front half-files* being opened to the *right* and *left* and *faced* upon the *Enemy*; March gallantly up and receive the *Charge*, whilſt the others provide for themſelves. This Motion may alſo be uſefull when you have gained ſome place of advantage, for then by this *Doubling of the Reere* your Battaile will be both lengthned and ſtrengthned, And ſo by the ſudden bringing of theſe Supplies into the *Reer*, you may not only relieve your owne, but happily *over-front* your *Enemy*. The *Figure* followeth.

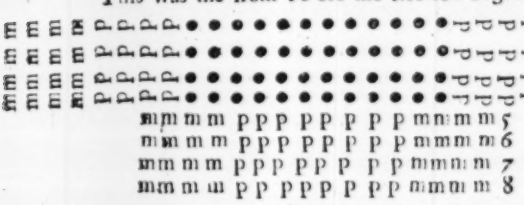
The Motion advantagious for the ſtrengthening of the Reer.

The Command is, *Front half-files, double your Reere by Diviſion.*

The Direction is, *Front half-files, face to the right and left, and march. When they are clear of the ſtanding part of the Body, face to the reer and move downe even with the reere.*

This

This was the front before the Motion begun.



Reer.

Front halfe-files face about to the right and left, inward. March forth into your places.

Inſtructions how to peforme this doubling.

The motion may be thus performed: The *Front halfe-files face* to the *right* and *left*, and *march* untill they are cleare of the other *half-files* of the *Reer*, Then they *face* to the *reer*, and march on, untill they have attained to be *even* in *rank* with them, whom they had Command to *double*, which perfects the *Doubling*. The way to *reduce* them, is as followeth: If you keep your place of the firſt Front, then let your *halfe-files face about*, (according to former directions) and *March untill they are cleare of the Reer halfe-files*, which ſtand; then *face* to the *right* and *left inward*, and cloſe their Diviſions; So being faced all to their Leader, they are Reduced. Sundry, and divers wayes there are for *Reducement*, both of this and moſt other *figures*. Nevertheleſſe I conceive, if I give one *Reducement* to each *figure*, it may ſuffice to thoſe that know little; As for ſuch which know better, they know more wayes to the wood then one: And ſurely, ſhould I inlarge my ſelfe, but halfe ſo much as I might, (and indeed in ſome things, no more then were needfull) I ſhould then bring my *Volume* into too great a *bulke*; and by the *price* hinder ſome of the profit: But I am willingly ſilent in many things, to the end, that others may thereby be the better encouraged by my weakneſſes, to take notice of their owne *worths*, which may induce them to put pen to paper, and thereby produce ſome *worthy work*, which may tend to their credits, and their Countries good.

The Reducement. The curious may find many wayes of Reducement.

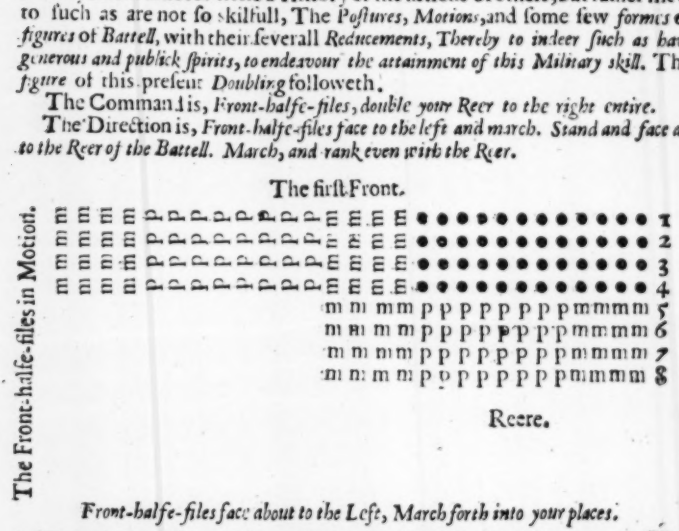
Chap. 25. *Of Doubling the Reer intire, by the Front halfe-files.*

THis next Doubling ſhall be a doubling of the *reer* to the *right entire*, by the *Front halfe-files*: which I intend not fully to demonſtrate, but to deliver the *figure*, as it will offer it ſelfe in the *motion*. And I conceive it will not bee amiſſe (for the benefit of the Learner) to render ſome *formes* in their moving *poſture*, rather then to ſhew them all as they would appeare, the *Motion* being perfected; for the way of the *working*, gives a great deale more light to the *Learner*, then to ſhew the thing abſolutely wrought. Neither would I have any think, although I ſhew theſe varieties of Doublings, and acknowledge them to be of ſingular good uſe for the extenſion of the *length* or *depth* of any *Battell*; but that the wiſe conduct and skill of the Commander

must so order them, that the *extending* of the *length*, doe not too much *weaken* the *depth*; nor that the *strenghning* of the *depth*, bee not too *great* a *weakning* to the *Front* or *length* of your Battell. I might give examples how divers great Commanders, either by good foresight, or ill over-sight, have gained to *themselves* and their *Countries*, *honour* and *victory*, or *losse* and *slavery*. But others have been very plentifull in examples of this nature, which makes me forbeare. For my intent is not to write a Hiſtory of the actions of others; but rather shew to such as are not so skilfull, The *Postures*, *Motions*, and some few *formes* or *figures* of *Battell*, with their severall *Reducements*, *Thereby to indeer such as have generous and publick spirits, to endeavour the attainment of this Military skill.* The *figure* of this present *Doubling* followeth.

The Command is, *Front-halfe-files, double your Reer to the right entire.*

The Direction is, *Front-halfe-files face to the left and march. Stand and face all to the Reer of the Battell. March, and rank even with the Reer.*



Front-halfe-files face about to the Left, March forth into your places.

Note the Motion.

The way to performe this motion (or doubling) is after this manner. The *Front-halfe-files*, *face* to the *Left*; and *march* untill they are cleare of the *Reer-halfe-files*: Then *face* again to the *left*, (which is the *Reer*) and *march* out-right, untill they *rank even* with the *last rank* of the *Reer-division*; which gives conclusion to the Doubling.

The Reducement.

For the *reducement*. Let your *Front halfe-files, face about* to the *left*, and *march* forth, untill they are cleare of the *Reer-half files*: Then *face* them to the *right*, and let them *march* into their places. That done, if the *Commander* goe to his first *front*, and *face* them all about to him; they are *reduced* as at first. To *double* the *Reer* to the *left entire*, may be done after the same manner: onely differing in the hand.

Chap. 26. *Of doublings by flanks, or Halfe-ranks entire.*

HAving shewed the *Particle-doublings*, and the Doublings of Front and Reer *entire*, and by *division*: I will next shew the Doublings of Flanks after the same manner. And will first begin with a *doubling* of the *left flank*

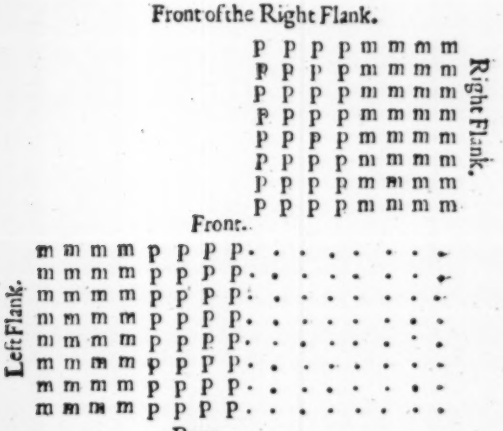
flanke, by advancing the *right flanke*, and placing it before the Leaders of the *left flanke*: which is a *doubling* both of Number and Place, and may ſerve to ſingular good uſe for the *ſtrengthening* of any *flanke*, where it may be needfull: For it makes the *Battell defenſible* on every part. The *Figure*, as it is in Motion followeth.

The Command is, *Right flanke, double your left flanke entire advancing.*

The Direction is, *Right flanke march, Stand, face to the left, and march, even with the left flanke.*

Face all to your Leader.

Front of the Right Flank.



Right flank that doubled, face about to the left, march forth into your places.

This reducement conceives the whole Body faced to the left flanke. If they face to the proper front, then right flanke that doubled, face to the right, march forth into your places, or half-files that now are, double your front to the left intire, either of theſe will do it.

If you would have your *Muskettiers* to *double even* with the *Muskettiers* of the contrary *Flanke*; Then it is no more but thus. Cauſe the *halfe ranks* of the *right flank*, to *march* forth right (as you may perceive by the *Figure*, untill the *Reer ranke* of the right *Flank* be *advanced* about *three foot* before the *Front* of the *left flanke*, then cauſe that *flanke* ſo *advanced*, to *Counter-march* their *ranks* to the *right*. And then all your *Muskettiers* will be together on the *left flank*: the *Pikes* likewiſe by themſelves on the *right flank*. If this be performed, then the *reducement* muſt be anſwerable after the ſame manner.

For inſtruction how the motion of this Doubling ought to bee performed (according to the words of Command and Direction formerly given) is as followeth. The *left flanke* (or Halfe-ranks of the left) *ſtands faſt*: the *right flanke* both *Muskettiers* and *Pikes* March forth-right untill the *Reer* of the *right flanke* be *advanced* before the *Front* of the *left flanke* as aforeſaid. Then *face* them to the *left*; and cauſe them to *march*, untill the *Pikes* are *even in Ranke* with the *Muskettiers*, then *face* to their *Leader*, and the *doubling is perfect*.

For

Reduce-ment. For the *Reduceement* let the right *flank that doubled face to the right*, and *march* untill they are cleare of the left Flank (or ſtanding part of the Battalia) Then cauſe them to face againe to the *right*, and March ſtraight downe into their places. Laſtly, being *faced* to the *firſt front*, they are rightly *reduced*: The right Flank may alſo face about, and double the *left flanke* towards the Reer, both (for manner of figure) worke one and the ſame effect, differing only in Circumſtance, the one being a *doubling advancing forwards* before the *front*; the other a doubling of the *depth* towards the *Reer*.

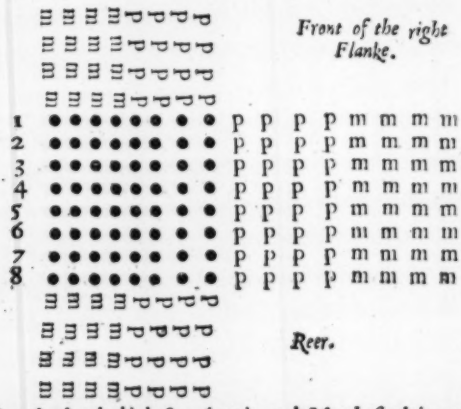
The *left flanke* may double the *right flanke* entire, either to the Front or Reer; but by this that hath already been ſhewne, the others may bee underſtood; wherefore I ſpare the Figures.

Chap. 28. *Of doubling ſanks by diviſion.*

THis Doubling, is a *doubling* of *flanks* by *diviſion*. And without queſtion, a ſerviceable *doubling*, and very uſefull, for ſome occaſions. For if you note the *figure*, and conceive rightly what it will produce (the *motion* being ended) it makes a ſtrong forme of Battell, to give fire three ſeverall wayes at once. The *figure* followeth.

The Command is, *Left Flanke double your right flank by diviſion.*

The Direction is, *Halfe files of the left Flanke face to the Reer: Front and Reer, Halfe ranks move cleare of the Body, and ſtand. Front halfe files face to the right, and Reer halfe files to the left; and move even with the right Flank.*



Halfe ranks that doubled, face about inward, March forth into your places.

Note the Inſtruction. The *motion* of this doubling, is thus to be performed. The *Reer halfe-files* of the *left Flanke*, face about to the Right: and then both the *Front halfe-files* and *Reer halfe-files* march forth-right; untill they are cleare of that part of the *body*, that *ſtands*: then each Diviſion faceth that way, which they are to *double*, which the *Front halfe-files* muſt doe to the right, the *Reer halfe-files*, to the *left*. And

ſo

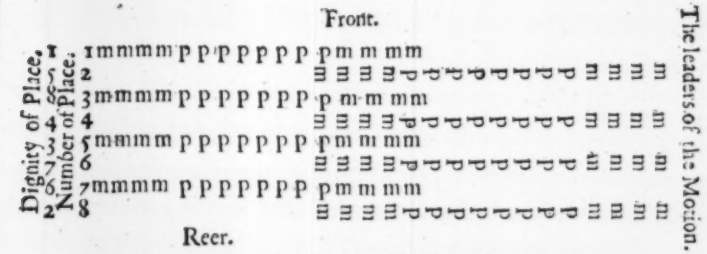
to *march* forth-right, untill the *doubling* be performed. For the *reducement*; you are to conceive, it may be diverſly performed: If the *Leader*, be at the *right flanke*, (which is the part that was *doubled*:) Then, the *reducement* is, as followeth: the *halfe-ranks* that doubled, *face about*, *inward*; and *march* forth-right untill they are cleare of the *right flank*, which *ſtands*; then, the *Front halfe files face* to the *left*, the *Reer halfe files* to the *right*, and then cloſe their *diviſion*. The *Leader* going to his firſt *Front*, and *facing* the whole Body to him, they are *reduced* as at firſt: If that the Right Flank would double the Left Flank by diviſion; the matter is the ſame: differing only in the *hand*. *Reducement.*

Chap. 28. *Of doubling Ranks intire.*

DOubling of *Ranks* to the *right intire*, is a doubling both of Number and Place: and in ſome ſort, worketh the ſame effect; as the doubling of *halfe-files to the right intire*. But differeth firſt in regard of the *parties*, which are the *doublers*, and ſecondly, in the *diſtance*, left after the *doubling*. For the firſt, which is matter of dignity. The firſt and firſt in honour, are *ranked* together in the *Front*, the ſecond and ſixt in dignity, make the *laſt ranke* in the *Reer*: So that the *Front* precedes the *Reer* the fourth of one in worth: whereas, in the doubling by *half-files*, the *Front* exceeded the *Reer*, by the the third part of one. Secondly, it differeth for the *diſtance*; by leaving *open order*, at the leaſt, between all the *ranks*. For further ſatisfaction, obſerve this *Figure* following. *Note the difference of dignity in this doubling. Differing from doubling by halfe-files in diſtance.*

The Command is, *Double your Ranks to the right intire.*

The Direction is, *Even Ranks face to the right and march: face to your Leader; and ranke even with the odde.*



Ranks that doubled, face to the left. March forth into your places.

The *motion* of this *doubling*, ought to be performed, as followeth; namely, if the *doubling* be to the *right*, as is above expreſſed by this *figure*: Every *even ranke*, *faceth* to the *right*. The *right-hand man* of each *ranke*, becomming the *leader* of his *ranke file-wiſe*: *leading* them forth, and in their *march* or *moving* forwards, a little bending to the *left*: that when the *left-hand man* of each Rank, (which are the *bringers up* of the *motion*) are cleare of the *ſtanding* part of the *body*, by only *facing* to the *Front*, they may ſtand even in *ranke* with the reſt of the *Company*. *Inſtructions for the Doubling.*

Note that the left hand men are the leaders of the motion, in the Reducement.

For *reducement* of this *doubling*: it may bee as followeth. Command the rankes that doubled, to *face* to the left, and march forth right into their places. Or for variety, command *halfe-ranks* of the *right*, to *face* to the *left*, and double the *left Flank*. Both which, as the *Company* now ſtand, work one and the ſame effect. The *left-hand men* of each rank, being the *leaders* of the *motion* in the *reducement*. To *double ranks* to the *left intire*, is to be done after the ſame manner, only obſerving the *difference* of the *hand*. This *doubling* may alſo be done by *diviſion*. But I ſpare the Figures.

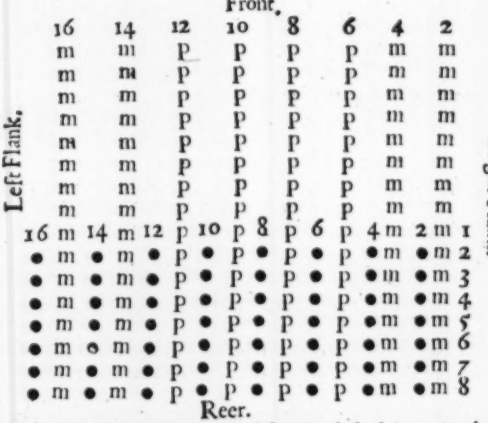
Chap. 29. *Of doubling Files intire, advancing.*

DOubling of *Files* to the *right intire*, advancing is (alſo) a *doubling* both of *number* and *place*: for it increaſeth the *depth*, to double their former proportion of number: as from *eight* to *ſixteen*; from *ten* to *twenty*, &c.

It alſo gaineth ſo much more *ground* before the *Front*, as formerly the *Battell* did containe: by *transferring the even Files* of the *body*, into the *ground*, before the Front of the odde *Files*: but this *doubling* diminiſheth the *number* of the *length* of your *Battell*, although it preſerves their *place*. I ſpare to ſpeak further of it, only thus. Let the antiquity of this *doubling* plead for its excellency, and if that may hold for a rule, then this may be ranked amongſt the beſt. For further directions, obſerve the following *Figure*.

The Command is, *Double your Files to the right intire, advancing.*

The Direction is, *Even Files advance forwards, and place your ſelves before the odde files to the right.*



Files that doubled face about to the left. March forth into your places.

Inſtructions to performe the doubling.

The *motion* of this *doubling* ought to be performed after this manner. The *odde files* are to *ſtand*, beginning your account from the *outmoſt file* to the *hand* named. The Muskettiers and Pikes of the *even files*, are to *advance* their *Armes*, and follow their *file-leaders*, every *file-leader leading* his *file* forth right; before his

his *next file* to the right, untill the *bringers up* of the *even files*, are orderly placed, before the *Leaders* of the *odde files*: as you may perceive by the *Figure*, for *Reducement*: let the *Files* that *doubled face about* to the *left*: the *bringers up* of each *file* leading them forth, right down the *Intervales*, which are on the left hand, untill they are come *even* with the *Reer*: and then *ſtand*, and *face* to their *Leader*, and they are reduced, as at firſt. The *doubling* of *Files* to the left intire, advancing; is after the ſame manner: It only differeth in the *hand*: Wherefore I ſpare the *figure*. They that love to be curious, may likewiſe *double files*, by *diviſion, advancing*.

The Reducement.

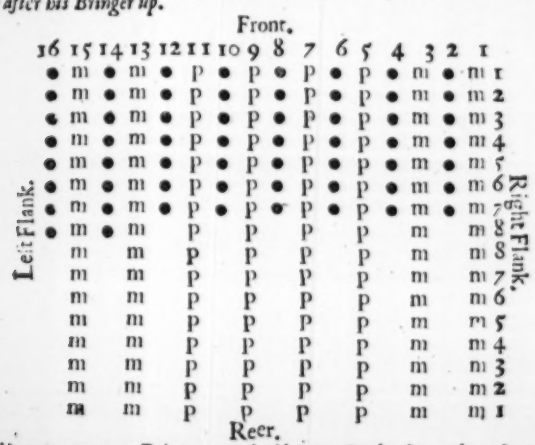
Chap. 30. *Of files doubling their depth.*

THis next *doubling* is a *doubling of the depth to the right intire*: and is likewiſe a *doubling* of *Files* as the other laſt ſhewn in the precedent Chapter. Being alike both for *number* and *place*: notwithſtanding it differeth from the other both in manner of executing, and in ſome ſort of the matter executed. For whereas the other *doubling*, by *advancing* of *Files*, did transferre all the *even files* into the ground before the *Front*. Contrariwiſe, this *doubling* doth transferre them into the ground next behind the *Reer*. And as in the other *doubling*, you may perceive halfe the *file-leaders*, to remaine in the *Front*; the other halfe to be *halfe file-leaders*. This *doubling* hath halfe the *file-leaders* in the *Front*, the other halfe being the laſt *Rank* of the *Reer*: * thoſe which were the former *Bringers up* being become the two *innermoſt* or *middlemoſt ranks*. The *Figure* followeth, being demonſtrated as the *Body ſtands*: the *Motion* being ended.

** By this doubling the bringers up become the middlemoſt Ranks.*

The Command is, *Files double your depth to the right: every man falling behind his Bringer up.*

The Direction is, *Even files from the right, face to the Reer, and every man place himſelfe after his Bringer up.*



Files as you were, or Bringers up, double your Ranks forwards to the Left.

The manner or way how this doubling ought to be performed.

The manner of the Motion for this Doubling is as followeth, the command being given, *files, double your depth* to the *right wise, every man falling behind his bringer up*, then the *even files* accounting from the *hand* named immediatly, *face about* to the *right*, and the *bringers up* of each of the *even files*, turn behind the *bringers up* of the odde *files* that *stand*: and so every man as he cometh downe to the *Reer* turneth to the *left* behind him that marcheth downe the next before him, untill those that were the *leaders* to the *even files* are become the *bringers up* to those which were the *odde files*.

Reducement.

The Reducement is as followeth; *Bringers up that now are, double your ranks forward to the left*, which being performed, they are as at the first. If you would be instructed in the manner, turne back and see it, where the *bringers up doubl. their ranks* forward into the *Front*, it is the 14. Chapter.

Some doublings omitted.

I have willingly past over another Doubling of the depth, because it it much after the manner of that which is done by advancing *file* upon *file*, which is the doubling of the last Chapter. It differeth only thus: in the last *figure* the *even files marched* forth, placing themselves before the *odde files*; and in this which I have omitted, the *even files* are to *face about* and *march* forth right towards the *Reer* untill the *file-leaders* of the *even files* have placed themselves just behind the *bringers up* of the *odde files*, and then every man to face to his *leader*.

Doubling the depth by Counter-march.

Some have a Doubling of the depth by *Counter-march*, which I conceive scarce worth penning, yet willing to leave every man to his owne liking, and as I doe nothing in it, so I will say nothing of it.

Doubling of place.

There are others that have written concerning *doublings* of *place*; nevertheless, because they are nothing but the *opening* or *ranks* and *files*, whereby the *length* or *depth* of your *battell* is *extended*, and so *doubled* in *place* and not in *number*. I forbeare to write further of them, desiring not to treat of such things as are more curious then necessary.

Chap. 31. *Of Conversion and Inversion, with their word of Command and Reducements.*

ACcording to my promise, I will now shew the difference betweene *Inversion* and *Conversion*, whose very names are so intricate and troublesome (to many) that they are more puzled with the words then the work: some are of opinion that they are both one, differing in letter not in matter; others would have a difference if they could tell how or where; but generally they are so chopt and changed one for the other, that the Souldier cannot in truth tell which is either: but that you may not be deceived, take this for a *rule*, that *Inversion doth alwaies produce file* or *files*; and *Conversion, rank* or *ranks*. *Inversion* consists of *files filing*, or of *ranks filing*. *Conversion*, of *ranks ranking* to the *right* and *left*; or by *increase* of *files ranking by even* or *uneven parts*, and of *ranks wheeling* to the *right* or *left*: I shall speak further of them in their severall places, but by the way you are to observe, that *Inversion* and *Conversion* require larger *distances* of *ground* then any other *motions*, which must be the Officers care to open the *ranks* or *files* so to be *Inverted* or *Converted*, whether it be *double distance* or *twice double distance*, or any other lesser or larger quantity of ground.

The

The words of *Command*, with their ſeverall *Reducements* are as followe.h

Inverſion.

Inverſion.

Files, file to the { Right, / Left, } *File-leaders, lead up your files as you were.*

Files, file to the *right* and *left* by Diviſion

Ranks, file to the { Right, / Left, / Right, and left, } *Files, rank as you were.*

Converſion.

Converſion.

Ranks, ranke { 3. 5. 7. or 9, to the right / 4. 6. 8. or 10, to the left / By increaſe 2. 4. 6. 8, &c. to the right / By increaſe 1. 3. 5. 7, &c. to the left / Intire to the right into the Front / Intire to the left into the Front / By Diviſion into the Front } *Ranks, rank as you were.*

Ranks, wheele to the { Right. / Left. / Right and left. }

For Reducement face about to the { Right / Left / Right and left } *And wheele into your places.* *Then face to your Leader.*

Files rank { 3. 5. 7. or 9, to the right / 4. 6. 8. or 10, to the left / By increaſe (to the right) 1. 3. 5. 7, &c. / By increaſe (to the left) 2. 4. 6. 8, &c. / To the right into the Front. / To the left } *Ranks, file as you were.*

To avoid the words of *Inverſion* and *Converſion*, I have delivered the directions without naming of either of them. Onely I have expreſt the *ſix* firſt *words* of *Command* to be *Inverſion*; and the laſt *ſixteene* to be *Converſion*. For I conceive it altogether unneceſſary to adde to every *word* of *Command*, *Inverſion* or *Converſion*; for by ſo doing, the unlearned and ignorant Souldier will be ſo confuſed with the ſtrangeneſſe of the *word*, that he will ſcarce by any meanes be made capable of the *matter*: For my owne part I have ever held this opinion, that the eaſieſt *expreſſions* are ever to be preferred in the way of *inſtruction* to young Souldiers. I might have much inlarged my ſelfe in words of direction concerning this ſubject, and have written concerning *ranks* and *files*; *ranking* by *decreaſe*: but theſe already expreſt may ſuffice to demonſtrate to any the grounds of all; and if any will be curious, by the practice of theſe the reſt will

The manner or way how this doubling ought to be performed.

The manner of the Motion for this Doubling is as followeth, the command being given, *files, double your depth* to the *right hand, every man falling behind his bringer up*, then the *even files* accounting from the *hand* named immediatly, *face about* to the *right*, and the *bringers up* of each of the *even files*, turn behind the *bringers up* of the odde *files* that *ſtand*: and ſo every man as he commeth downe to the *Reer* turneth to the *left* behind him that marcheth downe the next before him, untill thoſe that were the *leaders* to the *even files* are become the *bringers up* to thoſe which were the *odde files*.

Reducement.

The Reducement is as followeth; *Bringers up that now are, double your ranks forward to the left*, which being performed, they are as at the firſt. If you would be inſtructed in the manner, turne back and ſee it, where the *bringers up double their ranks* forward into the *Front*, it is the 14. Chapter.

Some doublings omitted.

I have willingly paſt over another Doubling of the depth, becauſe it it much after the manner of that which is done by advancing *file* upon *file*, which is the doubling of the laſt Chapter. It differeth only thus: in the laſt *figure* the *even files marched* forth, placing themſelves before the *odde files*; and in this which I have omitted, the *even files* are to *face about* and *march* forth right towards the *Reer* untill the *file-leaders* of the *even files* have placed themſelves juſt behind the *bringers up* of the *odde files*, and then every man to face to his *leader*.

Doubling the depth by Counter-march.

Some have a Doubling of the depth by *Counter-march*, which I conceive ſcarce worth penning, yet willing to leave every man to his owne liking, and as I doe nothing in it, ſo I will ſay nothing of it.

Doubling of place.

There are others that have written concerning *doublings* of *place*; nevertheleſſe, becauſe they are nothing but the *opening* or *ranks* and *files*, whereby the *length* or *depth* of your *battell* is *extended*, and ſo *doubled* in *place* and not in *number*. I forbeare to write further of them, deſiring not to treat of ſuch things as are more curious then neceſſary.

Chap. 31. *Of Converſion and Inverſion, with their word of Command and Reducements.*

ACcording to my promiſe, I will now ſhew the difference betweene *Inverſion* and *Converſion*, whoſe very names are ſo intricate and troubleſome (to many) that they are more puzled with the words then the work: ſome are of opinion that they are both one, differing in letter not in matter; others would have a difference if they could tell how or where; but generally they are ſo chopt and changed one for the other, that the Souldier cannot in truth tell which is either: but that you may not be deceived, take this for a *rule*, that *Inverſion doth alwaies produce file* or *files*; and *Converſion, rank* or *ranks*. *Inverſion* conſiſts of *files filing*, or of *ranks filing*. *Converſion*, of *ranks ranking* to the *right* and *left*; or by *increaſe* of *files ranking by even* or *uneven parts*, and of *ranks wheeling* to the *right* or *left*: I ſhall ſpeak further of them in their ſe erall places, but by the way you are to obſerve, that *Inverſion* and *Converſion* require larger *diſtances* of *ground* then any other *motions*, which muſt be the Officers care to open the *ranks* or *files* ſo to be *Inverted* or *Converted*, whether it be *double diſtance* or *twice double diſtance*, or any other leſſer or larger quantity of ground.

The

The words of *Command*, with their ſeverall *Reducements* are as followe.h

Inverſion.

Inverſion.

Files, file to the { Right, / Left, } *File-leaders, lead up your files as you were.*

Files, file to the *right* and *left* by Diviſion

Ranks, file to the { Right, / Left, / Right, and left, } *Files, rank as you were.*

Converſion.

Converſion.

Ranks, ranke { 3. 5. 7. or 9, to the right / 4. 6. 8. or 10, to the left / By increaſe 2. 4. 6. 8, &c. to the right / By increaſe 1. 3. 5. 7, &c. to the left / Intire to the right into the Front / Intire to the left into the Front / By Diviſion into the Front } *Ranks, rank as you were.*

Ranks, wheele to the { Right. / Left. / Right and left. }

For *Reducement* face about to the { Right / Left / Right and left } *And wheele into your places.* *Then face to your Leader.*

Files rank { 3. 5. 7. or 9, to the right / 4. 6. 8. or 10, to the left / By increaſe (to the right) 1. 3. 5. 7, &c. / By increaſe (to the left) 2. 4. 6. 8, &c. / To the right into the Front. / To the left } *Ranks, file as you were.*

To avoid the words of *Inverſion* and *Converſion*, I have delivered the directions without naming of either of them. Onely I have expreſt the *ſix* firſt *words* of *Command* to be *Inverſion*; and the laſt *ſixteene* to be *Converſion*. For I conceive it altogether unneceſſary to adde to every *word* of *Command*, *Inverſion* or *Converſion*; for by ſo doing, the unlearned and ignorant Souldier will be ſo confuſed with the ſtrangeneſſe of the *word*, that he will ſcarce by any meanes be made capable of the *matter*: For my owne part I have ever held this opinion, that the eaſieſt *expreſſions* are ever to be preferred in the way of *inſtruction* to young Souldiers. I might have much inlarged my ſelfe in words of direction concerning this ſubject, and have written concerning *ranks* and *files*; *ranking* by *decreaſe*: but theſe already expreſt may ſuffice to demonſtrate to any the grounds of all, and if any will be curious, by the practice of theſe the reſt will

be found. I also at first intended to have drawne a *figure*, the more lively to have expresst thereby each severall word of *Command*, but upon better consideration I perceived that some of them would require much roome, and not be so apt to print without their *figures* were cut, and were facile enough to the meanest capacity by their words of *Command* and *Direction*. Therefore I conceive the paines and cost may be spared, delivering the *figures* of some few of them that are most *necessary*, and for the rest, expresse by word what they will produce in *Figure*.

Chap. 32. *Of Files, filing in sequence.*

The Command is, *Files, file to the right.*

Inversion. TO perform this *word* of *Command*; the *right hand file* marcheth away *single*, the *second file* from the *right* falleth into the *Reere* of the *first*, the *third* behind the *second*, the *fourth* behind the *third*; and so consequently all the rest of the *files* fall into the *Reer* of their next *right hand files* untill all the whole Company become one *File*. It may be use full to passe some narrow Bridge or thicker, or elsewhere, where but one at once can passe, the Commander being willing to preserve his *files* intire and whole. The way for the *Reducement* may be after this manner. (the place being convenient) every *file-leader* is to *lead* up his *file* to the left of him that *marcheth* before him untill all the *file-leaders* are even in *rank* together, their *files* orderly following them. The *word* for the *reducement* is, *file leaders lead up your files as you were.* For *files* to *file on* in *sequence* to the *left*, may be performed after the same manner, it only differeth in the *hand*, but works the same effect, onely the *right hand file leader led* the *other*, and the *left hand file fel last of all* into the *Reere*; *this* contrariwise, is *led* forth by the *left hand file*, and the *right hand file* is the last that taketh place in the *Reer* of the extended file.

Files, file to the right and left by Division.

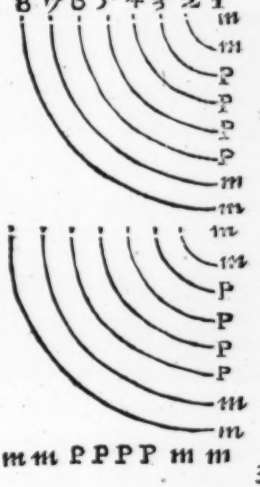
Files filing by *Division* is wrought after the same manner, but differeth in this, that the *right hand file* of the Company, and the *left hand file* of the same begin to lead forth at one and the same time in their severall *places*: the *files* of the *right flank* falling file-wise behind the *right hand file*, the *files* of the *left flank* falling in like manner behind the *left hand file*, so that if the *body* be flanke with *Musketiers*, then this *filing* by *Division* bringeth all the *Musketiers* into the *Front division*, and the *Pikes* in the *Reer* of them; if there be an odde *file* it most commonly falleth to the *right*. The word for *Reducement* is, *file-leaders, lead up your files as you were.* This sort of *Inversion* is called *filing in sequence*. I will now shew another sort of *Inversion* which is by *ranks filing*; the which, I will demonstrate unto you by two *Figures*, which will be sufficient to instruct the desirous.

Chap. 33. *Of inverting ranks, or ranks filing.*

THis following *figure* of *Inversion* is of *ranks filing* to the *right*, where all the *ranks* are to be inverted into the out-most *file* to the *right*; for the doing whereof let all your *files* be closed to their *order* or *close order*, as shall be thought

thought moſt neceſſary, the *ranks* opened either forward or backward to *double diſtance*, or twiſe *double diſtance*, (more or leſſe) as the Commander ſhall ſee moſt convenient according to his number: having cloſed your *files* and opened your *ranks* unto their due *diſtance*, then let every *Rank* move after his *right hand man* untill every *rank* ſtand right in *file* after the *right hand leader* of his *ranke*. In this *figure* I have onely opened the four firſt *ranks* to their *diſtance*, and *inverted* but two of the four; by which it may eaſily be perceived both the manner of the worke, and the matter which is to be * *wrought*; but if the Commander will performe it upon a *March*, then they ſhall not need to open to any *diſtance*, but to take their *diſtance* in the execution, which is the eaſieſt way and will be thus performed; the *right hand man* of the firſt *rank marcheth* forth-right, all his *ranke facing* to the *right* and *marching file-wiſe* after him. The *right hand man* of the ſecond *rank* falling immediatly after the *left hand man* of the firſt *ranke*, all his *rank* in like manner following him. The *right hand man* of the third *rank* after the *left hand man* of the ſecond, his *rank* likewiſe following him; and ſo for all the reſt, untill they are all become one *file*.

Front.



m m P P P P m m 3

* *This kind of Inverſion beſt performed marching.*

This *ranks filig* is ſooner performed and *reduced* than *files filing*, and in the *Reducement* will preſently be able to make reſiſtance againſt any oppoſition in the *Front*; whereas if *files file* it will be a great while before the *file-leaders* will be able to make good the *front*; the manner of the *Reducement* is as followeth. If they were *eight men* before in *rank*, then the firſt *eight men rank* to the *left* into the *front*. The next *eight men ranke* next after them which makes the ſecond *ranke*. The third *eight men ranking* to the *left* make the third *rank*; and ſo forward for the reſt untill they are *reduced* as at firſt: but it may be that ſome will object, that in this *figure* there * is mixture of *Armes*, which if they will avoid, they may either *march* forwards their *Muſketters* of each *diviſion* and *cloſe* them before the *Pikes*, and *invert* them firſt; or they may *march* forwards their *Pikes* firſt, and leave their *Muſketters* to come in the *rear*. Or if they pleaſe, they may upon

m m p p p p m m 4

The Reducement.

m m p p p p m m 5
m m p p p p m m 6
m m p p p p m m 7
m m p p p p m m 8

Reer.

Files, rank as you were.

* *Mixture of Armes hath many times proved advantagious.*

By this deep march is to be underſtood a right induction according to Ælian.

upon a *deep march*, firſt *invert* the *front-diviſion* of *Muſketiers*, then their *Pikes*, and laſt the *reer-diviſion* of *Muſketiers*, which way ſoever it be done. The word for *Reducement* will be, *Files, rank as you were.*

* *Ranks, file to the left*, is performed after the ſame manner: It differeth from this laſt done, but onely in the *hand*. And whereas the *Right hand file leader* was the *leader* of the laſt, this would be led by the *left hand file leader*; the *left hand leader* of each *rank* leading forth his *rank file-wiſe* as before it was performed, but to the contrary *hand*, I ſpare the *Figure*.

* *Ranks, files to the left.*

Chap. 34. *Of Ranks filing by diviſion, and how uſefull.*

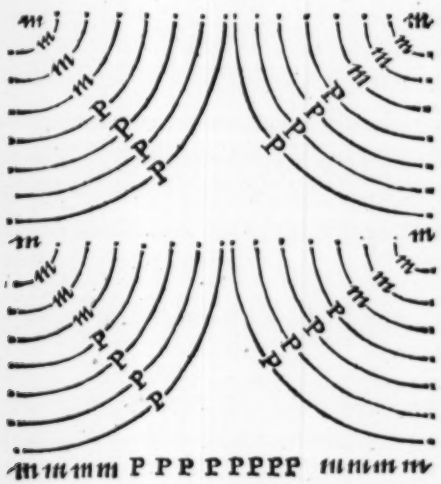
THis next *figure* of *Inverſion* is of *Ranks filing by diviſion*, and is a *doubling* of the *depth* by unequall proportion; for wheras in moſtof all other *doublings* the number of the *length* or *depht* is augmented, but to double their former proportion of number, this *doubling* of *Inverſion* makes their *depth* ſo many times more in number as there are *files* to *double*, or half ſo many times if it be done by *diviſim*, as in the next following *figure*. It hath beene of ancient uſe amongſt the Grecians, and in theſe our latter times it hath beene held of ſpeciall uſe to avoyd the ſhot of the great Ordnance when of neceſſity wee are to *March* againſt any *Battery*: It hath alſo beene held good to prevent the eminent danger of ſome great *ſhowre* of *ſmall ſhot* likely to bee powred out upon the *front* of your *Battalia*: It may alſo ſerve for a *guard*, honourable *paſſage*, large *interval*, *ſtreet*, or *galley*, (as ſome call it) for any great *Perſonage* or *Commander* to paſſe through: It is alſo of common uſe for *lodging* of the *Colours* or *Enſigne*, and many other ſuch like.

Tacticks. Ælian. Chap. 30. pag. 6. line the laſt.

The Command is, *Ranks, file to the right and left by Diviſion.*

Front

Front.



m m m m P P P P P P P P m m m m

m m m m p p p p p p p p m m m m

m m m m p p p p p p p p m m m m
m m m m p p p p p p p p m m m m
m m m m p p p p p p p p m m m m
m m m m p p p p p p p p m m m m

Reere.

Files, rank as you were.

For inſtruction how to performe this *motion*, it is the ſame with the laſt *figure*, differing onely in this, that as in the other *figure* all the whole *ranks* turned to the *right* behind their *right hand men*; in this motion the *left flank* (or *half ranks* to the *left*) fall into the outmoſt *file* to the *left*, the *half ranks* to the *right*

behind their severall *right hand men*, as you may perceive in part by the *figure*. I have shewne the *figure* in the manner of the *action* not fully performed; the *pricks rank wise*, denoting the places from whence they came; the quarter-circles shewing the way of the *motion*; the *pricks file-wise* directing or shewing their places they are going to.

Reducement by Conversion.

For *Reducement* to the *figure*, it is no more then this; the *ranks* which before *inverted* into *files*, now againe *convert* into *ranks as they were*: the word of Command for it is, *Files, rank to the right and left inward, as you were.*

I hope this that hath already beene shewne will be sufficient (at least in some small measure) to give satisfaction to those, which as yet have not knowne what is meant by *Inversion*, yet I could wish that such as exercise Companies of the Trained-bands of this Kingdome would rather make use of the plainer *word of demonstration*, which is *Ranks, file*; or *Files, file*: and leave out the word *Inversion* as a word not suitable with the capacity of divers of our Souldiers of the Trained-bands; especially of this City where Porters, Colliars, Water-bearers and Broom-men are thrust into the rooms of men of better quality, as though they themselves were to good to doe their King and Country service.

Military Discipline too much slighted by the midle sort of Citizens.

Chap. 35. *Of the severall parts of Conversion, and how they are to be understood.*

THe next branch of *discipline* which I offer to your view shall be of *Conversion*, and of its severall parts; wherein if there be any that think me tedious, let them turne it over and settle on some other part which may be to them more delectable, whilst I in the meane time shall endeavour to give content to all, neither stuffing out my Booke with *needlesse discourses*, nor yet too much abbreviating the matter, whereby to render it too obscure unto the commonest capacity; wherefore take their parts as they hereafter follow.

Conversion consists of these parts, *viz.* of:

Ranks ranking	*In equall parts*	1.
	In unequall parts	2.
	Intire into the Front	3.
	By division into the front	4.
	By wheeling to the flanks.	5.
Files ranking	*By equall parts*	6.
	By unequall parts	7.
	Intire into the Front	8.

*Ranking in equall parts * Thumanner used both by the Greeks and Romans, and is the best for a straight.*

First, of *ranks ranking* in *even* or *equall* parts, which is to be understood when there are *twelve*, or *twenty* (more or lesse) *marching a-brest*, and the Commander (either for the narrownesse of a passage or for some other intent) causeth his *ranks* to * *rank three*, or *fix a-breast*, or *five, ten*, or any other number, either according to the place or occasion, every *rank* holding equality of number.

Ranking in unequall parts.

Secondly, *ranks* then *rank* by unequall parts, when they *rank* by *increase* or *decrease*, as when the first *rank* shall be *three*, the next *five*, then *seven, nine, &c.* which is commonly used for the making of *Diamond* and *Triangular figures*.

Ranks ranking intire into the Front.

Thirdly, *ranks* then *rank intire* into the *front*, when the first *rank stands*, the second *rank* placeth it selfe on the *right* or *left* of the first, the third by the second, the fourth by the third, and so forward for all the rest, untill all the *ranks* (either to the *right* or *left*) according to direction are become one *rank* in the *Front*.

Fourthly

Fourthly, *ranks* then *rank* by *diviſion* into the *front*, when the ſecond *rank* and all the reſt of the *ranks* behind *open* to the *right* and *left*, the one part going to the *right*, the other to the *left*, *ranking even* with the firſt, as before, and altogether making one *ranke*. *Ranks ranking by diviſion into the front.*

Fifthly, *ranks* then *rank* to the *flank* or *flanks*, when either the *right hand man* o' each *ranke*, or the *left hand man* (or both together) are as it were the hindge of the *motion*, the reſt of each *rank wheeling* about them to the *right* or *left*, or each hand by *diviſion* unitll that every *rank* be brought into the *diſtance* which was before the *ranke*, betweene the *right hand men* of the *rank* next before and *right hand man* of the ſame *rank* you ſtand in; If it be to the *left* then they *wheel* into the *diſtance* betweene the *left hand leaders* of each *ranke*, If it be by *diviſion* then halfe the *rank wheeleth* to the *right*, the other halfe to the *left* and produceth two *ranks*. *Ranks ranking to the flanks by wheeling.*

Sixthly, *files* then *rank* by equall parts when they *ranke three*, *four* or *five* a-breſt (more or leſſe) ſtill keeping the number of men in *rank* of due proportion; If you *rank three* a-breſt (either to the *right* or *left* and your *file* be but *eight deep*, then the firſt *ſix* men make two *ranks*, the third *rank* muſt be made up by the *leader* of the ſecond *file*, and ſo for all the reſt; If you *rank four* and the *files* be *eight deep*, then every *file* makes two *ranks*; If you *rank five* the *files* being *eight deep*, then the firſt *five men* make a *rank*, and the firſt *two men* of the ſecond *file* from the *hand* named make up the ſecond *ranke*; five of the other *ſix* make up the third *rank*; and ſo forward for the reſt. If the *depth* of the *file* were *ten men*, then it would make two even *ranks*. *Files ranking in equall parts.*

Seventhly, *Files* then *rank* by unequall parts when they either *rank* by progreſſionall increaſe or by decreaſe, as when every *rank* exceeds the *rank* before it by *two*, *three* or *four*, be it more or leſſe, or elſe that each *rank* decreaſeth after the ſame manner. *Files ranking by unequall parts.*

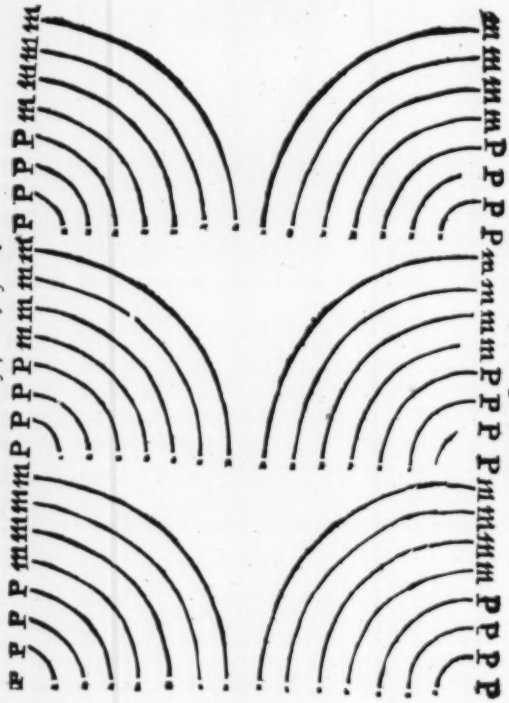
Eighthly, *files* then *rank* intire into the *front* when there is ſo much *diſtance* betweene *file* and *file* as will containe each *file rank-wiſe*, every man in the *file* marching forward to the *right* or *left*, as ſhall be commanded unitll he ſtand *even* in *rank* with the *Leader* of his *file* which brings the Body into one *rank*. *Files ranking intire into the*

Chap. 36. *Of Ranks wheeling by Converſion.*

IF I would ſtrive to be curious, I ſhould need no other *ſubject* to lengthen my diſcourſe, but only this of *Converſion*, which of it ſelfe would yeeld matter ſufficient to make a Booke, but I have taken a larger taske, and therefore like the Artiſts in Geographie, who ſometimes by a *ſpot* preſents a *Towne*, and by a *wrinkled line* a Large *River*; ſo muſt I crave of the favourable Reader, that in this ſmall Treatiſe of *Diſcipline* he will not expect that I ſhould inlarge my ſelfe ſo amply as I might upon every part; for then my Booke would grow beyond his bounds and I beyond my promiſe, but leſt I be taxed for digreſſion, this that hath already beene ſhewne may ſuffice for *Converſion*: but becauſe it may be expected that I ſhould ſhew *Converſion* in *figure* as well as the other *motions*, therefore to ſatisfie ſuch, I ſhall demonſtrate two *figures* unto them, which may ſerve for all the reſt; the one ſhall be of *Ranks wheeling by Converſion*, the other of *Files ranking four to the left*.

The Command is *Ranks wheele to the right and left by diviſion.*

The firſt Front.



This

This fore-going *figure* of *Converſion* is of *ranks wheeling to the right and left*, or *ranks ranking to each flank by wheeling*. It differeth from *ranks filing*, both in manner and matter. In the manner thus, Whereas in *ranks filing* to the right and left, the *right* and *left-hand file-leaders* preſerve and continue their places; and with that, their honours. In this *wheeling by Converſion to the right and left*, contrariwiſe: the *innermoſt file-leaders* become the *outmoſt* men in that part where the *Front* ſtood; the other *file-leaders ranking even* with them. Some men have called this, *Ranks, filing by Converſion, to the right and left*, but corruptly. For *Converſion* alwayes produceth *ranks*, as I formerly ſaid: and *Inverſion, files*. But their miſtake groweth from this, that when *Ranks wheel to the right*, or *right* and *left*, then (ſay they) they by *wheeling* become *file*, or *files*, which is a palpable miſtake. For when we have any *command* for *wheeling*, it is a *maxime* for us, to *wheel our aſpects unto the hand or part named*, By which doing, we either become rank, or ranks; and not files, as ſome have fought formerly to maintaine. One uſe, among many, for this *motion* is. It is the ſpeedieſt way for a great *Body* (if they have their due diſtance) to *give fire to one, or both flanks*, that as yet I know of. The way to performe this *motion*, is as followeth. The *right* and *left-hand men* of every *ranke* became the *Hindges* of the *motion*: the reſt of each rank *wheeling by equall diviſion* to the right and left about, and above their right and left hand Leaders, untill they become ranks to the flanks; as you may perceive by the *Figure*, where the *pricks* denote unto you the *places* they ſtood in before the *motion*, the *quarter circles*, ſhewing the way of their *motion*, themſelves being converted into two ranks, ſheweth the motion executed. I have onely *converted* three of the ranks; for it would have taken too much roome, to have *wheeled* all the *ranks*. And it is eaſie by this that is ſhewne to conceive the reſt. If you would avoid *mixture of Armes*, then place all your *Muſquettiers*, either in *Front*, or *Reer*; or elſe *wheel* only your *Muſquettiers*, and leave your *Pikes ſtanding*. Or it may be done, the *body marching* at *length*; the *Muſquettiers* being in the *front* and *Reer diviſions*. The *word* for the *reducement is*, *Ranks, Ranke as you were*.

The eaſieſt way for the *Reducement*, will be firſt for to *face* to the *Reer*, and then to *wheel back* into their places. Then *face* to their *Leader*; and they will be reduced as at firſt. Now we will come to ſhew the next *figure* of converſion, which is of *files* converted into *Ranks* by *equall* proportion.

Chap. 37. *Of Files ranking in equall parts.*

IN this *Chapter* I intend to ſhew the *manner of files ranking*, by *Converſion in equall parts*; which Motion I have ſeen uſed by ſome *Commanders*, at ſuch times as their Companies have beene but ſmall, having not had above two or three *files* of *Muſkettiers* upon a *flanke*; and being willing to *march forth* their Companies in Diviſions: And this, becauſe that two *a-breſt* would bee ſomewhat improper (unleſſe it were upon neceſſity, in ſome narrow *paſſage*) and that three *a-breſt*, is alſo ſomewhat with the thinneſt. Therefore to augment the Front of their *March*, they have ſhortned ſomewhat of their *depths*, in each diviſion; by cauſing their *files* to *rank* foure or five, according as their *depth* may be, when the Command ſhall be given Their *Motion* of *converſion* may alſo be uſefull for *larger bodies*. For if upon a *march* you are to paſſe through ſome *ſtreight*, where not above foure or five can *march a-*

breſt; and that being paſt through, you are to direct your courſe to the *right* or *left*: If your way be to the *right*, then cauſe your *files* to ranke to the *left*: If to the *left*: then let the *files* ranke to the contrary hand. For by ſo doing, having paſt the *ſtreight*, and *faced* your *body* that way, which you intend your *March*, by commanding the *file-leaders* to *march*; and the *half-files* to *ſtand*, and take their places: your body will be led again by their *proper file-leaders*, all *a-breſt*; the *Muskettiers* becomming againe the *flankers*, which in the paſſage of the *ſtreight* were in the *Front* and *Reer*. For the better underſtanding the manner of the motion, obſerve the following *Figure*.

Files, ranke foure to the left.

Front.

Direction for Files ranking four to the left.

This was the

1 File { m m m m *f.* / m m m m *h.*
2 File { m m m m *f.* / m m m m *b.*
3 File { m m m m *f.* / m m m m *b.*
4 File { m m m m *f.* / m m m m *h.*
5 File { p p p p *f.* / p p p p *h.*
6 File { p p p p *f.* / p p p p *h.*
7 File { p p p p *f.* / p p p p *b.*
8 File { p p p p *f.* / p p p p *h.*

9.

p *f*

p

p p

p p *b*

p

16 15 14 13 12 11 10

m m m m p p p p
m m m m p p p p
m m m m p p p
m m m m p p p
m m m m p p p
m m m m p p p
m m m m p p p
m m m m p p p

The way to performe this *Motion*, is as followeth. The *Command* being firſt given (as above-ſaid) the *right-hand-file-leader* leadeth forth his *File*: and the *three next men* behind him move forwards to the *left* of each other untill they *ranke even a-breſt* with their *file-leader*. The next *foure* in like manner *ranking* to the *left*, make the *ſecond ranke*. The *File-leader* of the *ſecond File* placeth himſelfe next after him that was the *halfe-file-leader* of the firſt, which now is become the *right-hand man* of the *ſecond ranke*; the three *next men* behind him, making up of his ranke in like manner. And ſo forward for all the reſt untill the *Motion* be fully perfected. This converts each *file* into two *ranks*; and brings all the *proper file-leaders*, and *halfe-file-leaders*, to make the *out-moſt file* to the *right*: the *bringers up* both of the *front* and *reer-halfe-files* make the *outermoſt file* to the *left*. The *figures of number* which are on the *left flanke* of the *figure*, in which the word *file* added to each of them, demonſtrate the *places* of the *firſt*, *ſecond*, *third*, and *fourth file*, and ſo conſequently for all the reſt, according to their *former ſtanding*, and the *places* they now occupy, being converted into *ranks*. The letters *f* and *h*; which are placed

on

on the *right flanke*, ſhewes the *places* of thoſe which were the *file-leaders*, and *halfe-file-leaders*: each of the *proper file-leaders* having now his *halfe-file-leader* next after him. I have ſhewne this *Figure* partly *performed*, partly *performing*, and partly *ſtanding*, as before the *Motion* began.

For *reducement* of this *Motion* of *files ranking*, foure to the *left*: One way is, to cauſe your *ranks* to *file*, (or *invert*) *to the right*, which being done, *Command every File leader to lead up his File to the left*: and ſo every man will have his *place*: For another way, *Face the whole body to the right, and command the File-leader to march, and halfe files to ſtand, and take their places*: and then they are all reduced, onely the *File-leaders* of the *right flanke*, are on the *left*, and the *file-leaders* of the *right flank* are one the *right*: which is reduced, by any intire *Counter-march*, of *rank* or *file*. *Reducement.* *A ſecond way of Reducement.*

Chap. 38. *The concluſion of Doublings.*

THere are yet another ſort of *Doublings*, both of *length* and *depth*, which are performed by *diviſionall wheelings*; which becauſe they have ever been accounted for *wheelings*, I will not diſplace them, but ſtill ranke them in their former places: although in truth they are *doublings*. The *working* part indeed is *wheeling*, but the intent or thing wrought is *doubling*. I will ſpeak further of them when I come to ſhew them in their ſeverall places, and here I meane to ſet a period to our *doublings*, concluding that thoſe *Souldiers* who can put every one of theſe to his right uſe, as alſo give to each his right *Reducement*, muſt needs be skilfull and expert in this part of the *Art Military*; and contrariwiſe they that are ignorant in theſe *doublings* can never truly attaine to the right managing of a *Foot Company*, either for *exerciſe* or *ſervice*; for *doublings* indeed are the onely *motions* for *variety* and *alteration* of *Figures* or *formes* of *Battaile*; no other *motions* doing the like. And therefore *doublings* muſt needs be accounted the moſt excellent amongſt all the *Motions*.

You that have eyes *to read and* skill *to judge,*
And have perus'd theſe Doublings *I have done,*
Though I have tedious *beene, yet doe not grudge,*
For you know well I have skipt over ſome:
But marvell not, the cauſe I doe not ſhew them,
It is not much materiall for to know them.

Thoſe that are skilfull in the Art *of* Warre,
And take delight to exerciſe *their* Men,
Shall finde more pleaſure in theſe doublings *farre,*
If that they intermixe *them now and then,*
And ſo contrive their doublings *in theſe caſes,*
And laſtly one word *brings them to their* places.

Why in our Countrey *doe wee* Captaines *chuſe,*
That have no skill *nor* artfull *inclination?*
They doe themſelves and Countrey *much abuſe;*
Thus ſo deceive *them in their exſpectation,*

I think

I think the Cauſe *of this fault in our* Nation
Is, that our Gentry *holds not* Armes *in* faſhion.

But ſome perhaps, will ſay, I am too bold;
There's no ſuch need for Captaines *to have* skil:
The Muſter-maſters *have enough* (*ſome hold*)
The Captaines *and the Counties for to fill.*
So whilſt the Muſter-maſter *doth the* labour,
The Officers *may* play *upon a* Tabour.

But ſtay, me thinks one puls me by the ſleeve,
And tels me that I have my ſelfe forgot:
Wherefore of doublings *here I take my leave,*
Intreating thoſe that read, miſtake *me not,*
Let *Muſter-maſters* take their *money* then,
But let the *Captaines* exerciſe their men.

Chap. 39. *Of Counter-marches: their antiquity, and words of direction.*

THe next branch of *Diſcipline* which offers it ſelfe to your peruſall are *Counter-marches*, which are of three kinds; to wit, *Choream*, *Lacedæmonian*, *Macedonian*, which is, Maintaining, Looſing, and Gaining: each of them are to be performed two manner of wayes; one by *File*, the other by *Ranke*.

Diverſities of opinions concerning looſing and gaining of ground.

There are alſo *Counter-marches*, *Intire*, and *Diviſionall*; but divers men are as divers in their opinions concerning the *Macedonian* and *Lacedæmonian* Counter-marches: ſome will have the *Macedonian*, a Counter-march of gaining ground, becauſe that it tranſers the *Battalia* into the ground before the *front*; others will have it a Counter-march of looſe, becauſe (ſay they) the *Enemy* being in the *reer* it makes a ſemblance of flying: ſome will have the *Lacedæmonian* a Counter-march of gaining ground, becauſe the *Enemy* appearing in the *reer*, it makes a ſemblance of charging or falling on: others call it a Counter-march to looſe ground, becauſe it looſeth all that ground the *Battalia* ſtood upon, taking inſtead thereof the ground behind the *reer*: there are others of opinion, that there are Counter-marches of looſe and gaine in either of them. All theſe are furniſhed with *reaſons* to back their *opinions*: but if I ſhould ſtand to ſhew their many and ſeverall reaſons, I might well be thought to be without reaſon my ſelfe; my opinion is, that taking the ground before the *front* is gaining ground, and that to leave the ground wee ſtood on to take the ground next behind the *reer* is looſe of ground; and yet to take either whereby there is advantage gotten muſt needs be gaining; but where the matter it ſelfe is ſo indifferent, it were fondneſſe to ſpend longer time about it; wherefore note, that *Counter-marches* were of ancient uſe amongſt the Greeks many hundred of yeares ſince, and from them learned and practiſed by many other *Nations*, and ſo ſtill continued unto this day: but as the *Snow-ball* by much rowling becomes the greater, ſo in like manner theſe *Counter-marches* have received *additum* in all ages; ſo that the three originall ones are now become more then thirtie,

To go back unto the ground wee have formerly paſt is loſſe of ground.

Counter-marches of great antiquity.

thirtie, accounting theſe *diviſionall*, and yet are all of them fathered upon one or other of the three kinds; though ſome of them will ſcarcely be owned or acknowledged, as you ſhall perceive when I come to ſhew them in their ſeverall places; But amongſt all the *Motions* this might be the beſt ſpared, as being leaſt beneficiall to this our moderne *Diſcipline*. But becauſe that *knowledge is no burthen*, and that at ſometimes they may be uſefull, therefore firſt take the word of *Command* and *Direction*, which are as followeth.

Counter-marches leaſt uſefull of all other parts of the Art Military.

Intire Counter-marches by File.

Choreau.

Files to the {Right / Left} *hand, Counter-march.*

Files to the {Right / Left} *Counter-march, every man turning on the ground he ſtands.* Lacedemonian.

File-leaders, face about to the {Right / Left} *the reſt paſſe through to the* {Right / Left} *and place your ſelves behind your Leaders.* Macedonian.

File-leaders ſtand, the reſt paſſe through to the {Right / Left} *placing your ſelves before your Leaders.* Baſtard Counter-march.

File-leaders ſtand. the reſt paſſe through to the {Right / Left} *placing your ſelves before your leaders, following your bringers up.* Baſtard Count.

Bringers up, face about to the {Right / Left} *the reſt paſſe through to the* {Right / Left} *and place your ſelves before your bringers up.* Lacedemon.

Bringers up ſtand, the reſt of the Body paſſe through to the {Right / Left} *placing your ſelves behind your bringers up.* Lacedemon.

Intire Counter-marches by Ranks.

Ranks to the {Right / Left} *Counter-march.* Cretan or Chorean.

Ranks to the {Right / Left} *Counter-march, every man turning on the ground he ſtands.* Lacedemon.

Right hand file face to the left, the reſt paſſe through to the right, placing your ſelves behind your right hand men. Macedonian.

Left hand file may face to the right, and doe as much.

Right / Left hand file ſtand, the reſt paſſe through to the {Right, / Left,} *placing your ſelves on the outſide of your* {Right / Left} *hand men.* Baſtard Count.

Right / Left hand file face to the {Right, / Left,} *the reſt paſſe through to the* {Right, / Left,} *placing you before your* {Right / Left} *hand men.* Lacedemonian.

Diviſionall Counter-marches by Files.

Cretan or Chorean.

Counter-march Front and Reere into the midſt.

File-leaders and half-file leaders ſtand, the reſt paſſe through to the right and place your ſelves before your leaders. Baſtard Counter-march.

File-leaders and bringers up ſtand, the reſt paſſe through to the right and place your ſelves before your leaders and bringers up. Lacedemonian.

Macedonian. Ballard Count.

File leaders face about, bringers up stand, the rest passe through to the right, and place your selves behind your leaders and bringers up.

Front half-files, interchange ground with the Reare.

Divisionall Counter-marches by Ranks.

Chorean or Cretan. Lacedemonian. Macedonian. Ballard Count.

Counter-march your (wings) or Flanks into the midst (or Center.)

The outmost file of each flank face outward, the rest passe through to the right and left, placing your selves before your outside men.

The outmost file of each flanke face inward, the rest passe through to the right and left, placing your selves behind your outside men.

The outmost file of each flank stand, the rest passe through to the right and left, and place your selves on the outside of your outside men.

Interchange your flanks.

Note what is done by the *outmost files*, may be *reduced* by conuerting the *command* to the *innermost files*, but must be done before they have *closed* their *divisions*, &c.

Chap. 40. *Of the Chorean Counter-march, and the way to performe it.*

The distance for Counter-march is six foot, or open order in rank and file.

I Could willingly have *prickt* a *figure* for each of these *Counter marches*, but that they will take up too much roome; and therefore I will only *prick* some few of the hardest of them, and for the rest I will endeavour by *words* to make them as facile as I may, that so they may be apprehended by the meanest capacity: and first I will begin with the *Persian, Cretan*, or *Chorean Counter-march*. The *word* of *Command* and *Direction* is,

Files to the right hand counter march.

Note that when there is a Counter march commanded without any other addition, then it is alwaies intended a Chorean Counter-march.

This *Chorean counter-march* is by some called the *Moderne counter-march*, I conceive their reason to be, because that it is more in use then any of the other, or else for antiquity, it might claime many ages. It is a *Counter-march maintaining ground*, for it worketh its effect on the same *ground it stands*, neither *losing* nor *gaining*, but it *transferres* the *file-leaders* into the *place* of the *bringers up*, and the *bringers up* into the *place* of the *file leaders*, with all turning the *aspect* of the *Bids* or *Battalia* to the *Reare*. The way to performe this *motion* is as I shew each; although as the *word of command* is given, if it be to the *right*, then all the *file leaders* step towards with their *right legs* and *face about* to the *right*, every *file leader* with his *file* following him pulling downe towards the *Reare* through the *interval* on his *right hand*, still observing to keep *even* in *rank* with his *right hand men*: But by the way, note that no man must *turne* until he come to the *ground* where at first his *file leader* began the *Counter march*; this *motion* is then performed when the *bringers up* have attained into the *place* where before their *file leaders* stood, being *faced* right after them, *Files to the left hand Counter-march.*

Observe the direction for the Chorean Counter-march.

To *Counter-march* to the *left* worketh the same effect, and is done after the same manner, onely *differing* in the *hand*.

For *Reducement*, if you *counter-march* to the *right*, doe as much to the *left*, and they will be as they were. For any *native Counter-march* of *files* will be *reduced* (of what kind soever) by making another *native Counter-march* to what *hand* soever.

But

But if any deſire to be ſo *curious* as to have them not only *reduced* to the ſame *aſpect*, but alſo *preciſely* to the ſame *place*, then if the *Counter-march* were to the *right*, *counter-march* againe to the *right*, if to the *left*, accordingly to the *left*.

Chap. 41. *Of Counter-marching to loſe ground.*

The command is, *Files to the right Counter-march, every man turning after his leader on the ground he ſtands.*

Lacedemonian.

THis *Lacedemonian Counter-march* is a *Counter-march* of loſſe of *ground*, for that it leaves all the *ground* the *Battalia* formerly did command, to him or *place* there of taketh the *ground* behind the *Reere*. This *Counter-march* is to be performed when the *Body* is upon a *ſtand*: for the *Grecian* time. The *effect* towards the *Reer*, the *Greeks* were won with this *Counter-march* to bring their *file leaders* to oppoſe any Enemy appearing in the *Reere*, thereby gallantly bearding their Enemies in the teeth, neither politickly making ſhew of *flight* whereby to bring the Enemy into *diſarray* nor over prouidently carefull of the *aduantage* of *ground*: the *motion* of this *Counter-marches* to be performed as followeth; the *file leaders* of each *file* are to ſtep ſide-wayes to the *right*, and therewithall to *face about* to the *Reer*, and ſo *march* even in *rank* together downe betweene the * *intervalls*, no man aduancing a *foot* forwards, but turning in like manner after their *leaders* when they are paſt by them, ſtill obſerving to keep their due *diſtance*; and ſo a whole *rank* together ſtill turning off to the *right*, each *rank* ſucceſſiuely doing the like vntill the *Counter-march* be fully performed; any *intire Counter-march* of *files* will *reduce* thus, But for order ſake take one of the ſame ſort to the contrary *hand*, which is,

* *An interuall is the ſpace of ground betweene file and file, or rank and rank, but in this place is intended the ſpace of ground betweene the files.*

Files to the left counter-march, every man turning after his leader the ground he ſtands.

I ſhall not need to ſpeak further concerning this *counter-march* of loſſe of ground to the *left*, ſeeing that it differs from the other onely in the alteration of the *hand*. The ſubſtance and effect of both being one and the ſame, only I will now ſpeak of a ſecond ſort of *counter-march*, which is of the ſame kind.

The command is, *Bringers up face about to the right, the reſt paſſe through to the Reere, and place your ſelues before your bringers up.*

Lacedemonian.

Thus *Lacedemonian Counter-march* doth alſo loſe the ground whereon it formerly ſtood, and takes the ground behind the *Reere*: the manner of the *motion* is as followeth; the laſt *Ranke* or *bringers up face* to the *reer* and *ſtand*, the reſt of the *Body faceing about* in like manner, and paſſing through or betweene their *bringers up* and placing themſelves even in *rank* before them. The *motion* is begun by the *rank* next the *bringers up*, and ſo continued ſucceſſiuely by the reſt vntill the *counter-march* be ended: it may be *reduced* by doing the ſame to the *contrary hand*; Nevertheleſſe, for breuities ſake I will make uſe of a ſpring from the ſame bough, and *reduce* this *Lacedemon counter-march* by another of the ſame kind,

The command is, *Bringers up ſtand, the reſt paſſe through to the right, and place your ſelues behind your bringers up.*

Lacedemonian.

The *Lacedemonian Counter-march* is thus to be performed, the laſt *ranke* (or *bringers up*) are to *ſtand*, and the reſt of the *Body* to *face* to the *Reere*, and paſſe through to the *right*, and place themſelves behind their *bringers up*, contrary to

the *Counter-march* last shewn, where they placed themselves before. The *motion* is also begun by the second *rank* from the *Reer*, the rest following successively untill the *file leaders* are become the *bringers up*, then *face* them about after their proper *file leaders*, and they are *reduced*.

Chap. 42. *Of Counter-marches to gain ground, or the Macedonian Counter-march.*

The command is, *File leaders, face about to the right, the rest passe through to the right, and place your selves behind your leaders.*

Macedonian.

THis *Macedonian Counter-march* is for *gaining ground*, for that it leaves the ground the *Battalia formerly stood upon*, taking in *lieu* thereof the ground next before the *Front*: It also turnes the *aspect* towards the *reer*. The *motion* of this *counter-march* is from the *reer* to the *front*, contrary to the *Lacedemon*, whose *motion* is from the *front* to the *reer*; this *Macedonian counter-march* makes semblance in the *reer* of *flight*, but presently produceth an orderly *settled front*, when perhaps the Enemy with a two early pursuit hath broken the order of their Array.

Macedon counter-march makes semblance of flight.

The way to performe this *counter-march*, according to the directions formerly given, is as followeth; the *file leaders* or *first rank*, *face about* to the *right*, the rest of the *Body* passe through betweene the *intervals* (or distance of *files*) to the *right*, and place themselves behind their *leaders*, every *rank* (beginning with that next the *file-leaders*) passing through successively and taking their places untill the *Counter-march* be fully executed. It may be Reduced as the rest, by doing the same to the *contrary hand*, or as I have formerly said, by any *intire counter-march* of *file*, and therefore I will *reduce* it by another *Macedonian counter-march*. The command is as followeth.

Macedonian.

File leaders face to the reer, the rest of the Body passe through to the left, following your bringers up, placing your selves behind your leaders.

This *Macedonian counter-march* is rather remembered for its antiquity then excellencie (as some more of them be) nevertheless if any will be curious to observe the *motion*, it may be performed as followeth: the *first Rank* (or *file leaders*) *face* to the *Reere*, then the *last Rank* begin the *counter-march*, passing forward betweene the *intervals*, the *seventh Rank* following the *eighth*, the *sixt* following the *seventh*, and so likewise the rest untill the whole *body* be transferred into the ground before the *front*, and then joyntly together *facing* to the *right about* after their *leaders*, the *counter-march* is ended. For *Reducement* observe this for all, that any *intire counter-march* of *file* may be *Reduced* by another *intire counter-march* by *file* of what *kind* or to what *hand* soever.

These three last Chapters of *counter-marches* are the originall grounds of all the rest, yet I shall shew one in the insuing Chapter, which time hath begotten out of the latter *two*, which takes part with *either*, being absolute in *neither*.

Chap.

Chap. 43. *Of the Baſtard Counter-march.*

The command is, *File leaders ſtand, the reſt paſſe through to the right and place your ſelves before your leaders.*

Baſtard Counter-march.

THis paſſing through (or *baſtard counter-march*) is partly *Macedonian*, and partly *Lacedemonian*, for in it with the *Macedon* it takes the ground before the *Front*, the *motion* being from the *Reer* forward, it is partly *Lacedemonian*, for that they paſſe through and place themſelves before their *leaders*, and for that it makes ſemblance of *falling on* or *charging* the Enemy; nevertheleſſe, the *Macedonian* doth name it, for that it alters not its *effect*. The *Lacedemonian* refuſe that, for that it takes the ground before the *Front* and not that behind the *Reer*, and with the *Chorean* it holds no affinity: And indeed many there be that will not allow it for a *Counter-march*, for certaine the word it ſelfe will not beare it; notwithſtanding, ſeeing that it hath been long ranged amongſt them, I will not be he that ſhall diſplace it, but will paſſe forwards to ſhew the manner of the *motion*, which is to be performed as followeth. * The *file leaders ſtand* according to the former direction, the reſt of the *Body advance* their *Armes*, the *ſecond rank* ſtill paſſing through to the *right* and placing themſelves before the *firſt ranke*, the *third Rank* before the *ſecond*, the *fourth* before the *third*, and ſo forwards for the reſt untill the laſt *rank* or *bringers up*) are become the *foremoſt*, which perfects the *motion*. It may be ſeverally uſefull, as to *Skirmiſh* againſt an Enemy, advancing by way of *Introduction*, or upon occaſion to bring the *Reere men* to *march* in *Front*, and ſuch like. For the *Redducement* you may doe as much to the *contrary hand*, onely for order take I will *Reduce* it by another like it ſelfe.

** Inſtructions to performe the motions of the counter-The baſt. counter-march is the ſame with introduction.*

The command is, *File leaders ſtand, the reſt paſſe through to the right, placing your ſelves before your leaders, following your bringers up.*

Baſt. counter-march.

This *motion* may be done either to the *right* or *left*, and is nothing differing from that *laſt* ſhewne, but that whereas the *other* began with the *ſecond ranke*, this contrariwiſe begins with the *laſt ranke*, (or *bringers up*) every *rank* ſucceſſively following the *rank* which came from *behind* them untill they which were the *leaders* are become the *laſt* in the *Reere*. If this *counter-march* be ſtill done, it may be *Reduced* by any of thoſe formerly ſhewne, &c.

Chap. 44. *Of Countermarching Ranks to maintaine ground.*

The command is, *Ranks to the right hand Counter-march.*

Chorean.

THis *Chorean Counter-march* of *ranks* is an altering or changing of one *Flank* for the other, the *battalia* ſtill keeping the ſame *ground* only the *right flank* becomes the *left*, and the *left* becomes the *right*.

The way to performe this *Motion* is as followeth; the *Command* being given, then the whole *Body faceth* to the *hand* named, and every man in the *outmoſt File* to the *right* (*Files* by this *facing* being become *Ranks*) turnes downe through the *interval*, or (*diſtance* betweene *Ranke* and *Ranke*) *marching* forth right unto the part which was the *left flanke*, with their *Ranks file wiſe* following them, being come unto their *ground*, they *face* as before,

and the *Countermarch* is performed: for the *reducement*, let *Rankes Countermarch* to the *left*, after the ſame manner, differing onely in the hand, and they are as at firſt.

Chap. 45. *Of Countermarching Ranks to loſe Ground.*

The Command is, *Ranks to the right-hand Countermarch, every man turning after his right-hand man, on the ground he ſtands.*

Lacedemon. *Ranks by this facing become files, and files to the contrary become Ranks.*

THis *Lacedæmonian Countermarch of Ranks, is a falling on upon the left Flanke: the Motion being begunne by the right*; It leaves all the ground, the *Battalia* ſtood on, and takes in place thereof the *ground beſide the left Flanke*, turning the *Aſpect* to the *left*: The manner or way to performe this *Motion*, is as followeth: The whole *Body* faceth to the *right*; and then the *right-hand file* being *faced*, (becomes a *Ranke*) begins the *Countermarch*, turning downe the *Intervals* of the *Ranks*, (which by this *facing*, is made the *diſtance* between the *Files*) and ſo *marcheth forthright*, beyond that which was the *left flanke*, every man following him that was his *right-hand-man* (but not ſtepping forwards one foot of ground) untill the *Countermarch* be performed. For the *Reducement* of this *Countermarch*, doe as much to the *left*, and they will be as at *firſt*: Or (if you pleaſe) take another of the ſame kind; The word of *Command*, or *Direction*, is.

Right hand-file, face to the right, the reſt paſſe through to the right, and place your ſelves before your right-hand-men.

Lacedemon. THis *Lacedemonian Countermarch of Ranks, makes a falling on upon the right Flanke, the Motion* being from the *left Flanke*, to the *right*, leaving all the ground whereon the *Battalia* ſtood, and taking in lieu thereof, the ground *beſide the right flanke*. In thoſe dayes, when *Countermarches* were more uſefull, and accommodable to their *Military Practiſes* and *Diſcipline*, then now they are for ours; the *Lacedemonian Countermarches* were of chiefe repute, aſwell amongſt the *Macedonians*, as the *Spartans*, and others: the way to performe this *Motion* is as followeth. The *right-hand file faceth* to the *right*, and paſſeth through the *Intervales* or ſpaces to the *right*: placing themſelves, before their *right-hand men*, untill the *left-hand-file*, become the *formoſt Ranke*; If you doe this *Countermarch* by it ſelfe, then for *Reducement*; firſt *face* them to their *Front proper*, then let the *left-hand-files face* to the *left*, and doe as much to the *left*; and then they will be at firſt.

Chap. 46. *Of the* Macedonian *Countermarch by Ranke.*

The Command is, *Right-hand file face to the left, the reſt paſſe through to the right, placing your ſelves behind your right-hand men.*

Macedon. THis *Macedonian Countermarch of Ranks, contrary to the* Spartan, *diſmarcheth from the enemy upon that Flanke where he appeares, and preſents the contrary Flank*

Flank *to receive the Charge* It is performed after this manner. The outmoſt *file* to the Right, faceth to the Left. The reſt of the *Body* or *Battalia* acteth to the Right; every man paſſing through to the Right, and placing themſelves behind their Right-hand men: For the *reducement* to this *Countermarch*, as all the reſt, there are divers, and ſeverall wayes; but performe as much to the Left, as you have done to the Right, and they will be as at firſt: Or if you pleaſe, this following *Baſtard Countermarch* will doe the ſame.

The word of Command or Direction is, *Right hand-file ſtand, the reſt paſſe throug to the right, placing your ſelves, on the outſide of your right-hand-men.*

Baſtard Countermarch.

THis paſſing through, or *Baſtard* Countermarch of Ranks, doth alter both ground and Flank, ſtill reſerving the *aſſiett*, without alteration. It is to be performed as followeth. The outmoſt or Right-file ſtands; the reſt of the Body facing to the Right, paſſe through to the Right, every man placing himſelfe on the right ſide of his right-hand-man, and ſo ſtanding even in Rank, the *Motion* ſtill continuing, untill the Left-hand-file is become the right, the right, the contrary. If this Countermarch be done alone, for the *reducement*; let the Left-hand-file ſtand, and doe as much to the Left, as before to the Right, and they will be as at firſt.

Chap. 47. *Of Countermarching Front and Reer into the middeſt.*

Of divisionall Countermarches.

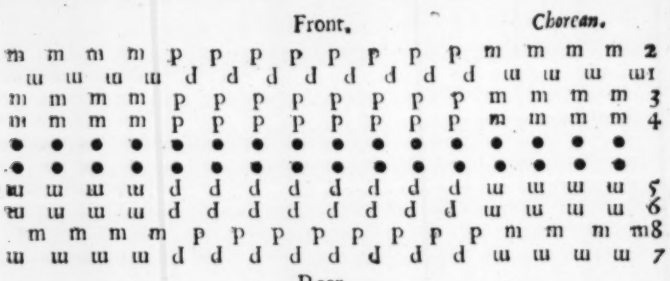
FOr the intire Countermarches, I have indeavoured to expreſſe them, as well as I could in words, but for the divisionall Countermarches, I intend to demonſtrate, both in word, and figure, whereby they may be the more eaſily apprehended by ſuch as ſhall be deſirous to know them: notwithſtanding, before I enter upon the divisionall Countermarches, I would willingly cleare one thing which by ſome will be carped at; which is, the uſing of the word *Middeſt*, inſtead of the word *Center*: The word *Center* (I confeſſe) hath been the more uſuall word amongſt us: and yet it is not altogether ſo proper to our uſe as the other; wherefore give me leave, without offence, to uſe thoſe words, which are not onely more proper, but more ſignificant. The *Midſt* of the *Battell*, is to be underſtood, either from the *Front* and *Reer*, or from both *Flanks* (or *Wings*:) If between *Front* and *Reer*, the *Midſt* muſt be between the *Halfe-file-leaders*, and the *Reer-ranke* of the *Front-halfe-files*, extending it ſelfe from *Flanke* to *Flanke*: The *Midſt* between the *Flanks*, is between the two *innermoſt files*, continuing the whole depth: from *Front* to *Reer*. The *Center* is truly the extreameſt part, circle or point in the *midſt* of a *circumference*, and therefore not ſo pertinent to expreſſe the intention and true underſtanding of the *Motion*, as the word *Middeſt*. Wherefore not to triſle time in matters ſo apparent, we will proceed to our firſt divisionall Countermarch, which ſhall bee *Cheram*.

Middeſt and Center. The midſt is to be underſtood in a twofold ſence either between the Files, or between the Ranks.

The Command is, *Countermarch Front and Reer into the middeſt.*

The Direction is, *Halfe-files face to the Reer; Front Halfe-files turn off to the right; Reer Halfe-files to the left.*

Front...



This diviſionall *Chorean* Countermarch, brings our *File-leaders*, and *bringers up* together in the *midſt*, and the Ranks that were in the *midſt* into the *Front* and *Reer*. It is a Countermarch maintaining ground, for every man Marcheth up into his *leaders* ground; before he faceth about to Countermarch: The way to performe the *Motion*, is as follgweth. The *Command* being given to Countermarch, either let the *Commander*, or ſome other of the *Officers* command the *Halfe-files*, to *face about*: then the *file-leaders* ſtepping forwards, with the right legge, *face* about to the Right, paſſing downe the *Intervals* on the right hand, the reſt of the *Front-halfe-files*, following their *Leaders*, and not *turning*, untill they come to the ground, where their *Leaders* turned down before them: The *Bringers up* with the *Reer halfe-files*, at the ſame inſtant turning down their *Intervales*, on the *left hand*, the reſt of their *diviſion* following them, untill the *file-leaders* and *bringers up* meet together in the *midſt* of the *Battell*, and then having *faced* all to their *leader*, the *Motion* is performed. For the *Reducement* of this *figure*, doing the ſame thing over againe, will *reduce* it. Or any other *diviſionall* Countermarch of *File*.

Note that for Countermarching Front and Reer into the midſt, the Front halfe-files ever turne off to the right, the halfe-files to the Left, which being truly obſerved, they will alwaies meet even in the middle of the Battell; where to the contrary if they turne both off to the Right, they can never doe the Countermarch *but wrong.*

Chap. 48. *Of bringing Front and Reer together, into the midſt, by the Baſtard Countermarch.*

The Command is, *File-leaders, and halfe-file-leaders ſtand, the reſt paſſe through to the right and place your ſelves before your leaders.*

Note that as the front Halfe-files empticth the ſpace of ground betweene the leaders and Halfe-file leaders placing themſelves in the ground before the Front, ſo in the mean time their places are repleniſhed by the ſouldiers of the reer Halfe-files which march up and ſupply their roomes.

THis *Baſtard* Countermarch, doth bring the *Leaders*, and *Bringers up*, together, into the *midſt*, and ſaves two *facings*, and is quicklier performed, then the other laſt done: or any other in the precedent Chapters: The way to performe the *motion*, is as followeth: The *firſt Rank* ſtands; and the *Halfe-file-leaders* ſtand, then thoſe of the *Front Halfe-files* paſſe through their *Intervals* to the Right, placing themſelves before their *file-leaderss*: The *ſecond ranke* before the firſt, the third before the ſecond, the fourth before the

third,

the third; the *Reer Halfe-files* at the ſame inſtant doing the like, and placing themſelves before their *Halfe-file-leaders*: as the other did, before their *file-leaders*: This *Motion* may be either reduced by doing the ſame over againe to the contrary hand, or elſe by Countermarching *Front* and *Reer* into the *midſt*, or by any other of the *diviſionall* Countermarches of *Files*.

Another way of bringing the Front and Reer into the midſt, by the Chorean Countermarch.

The Command is, *Front and Reer Halfe-files, Countermarches to the right.*

This *Chorean* Countermarch doth alſo bring the *File-leaders* and *Bringers up* together into the *midſt*, and turns the *aſpect* towards the *Reer*, making the *Halfe-file-leaders* the *file-leaders* accidentall. The Countermarch is eaſie and quickly performed; the manner is as followeth; (The *Command* being given as aforeſaid; the *Front Half-files* Countermarch to the Right, following their *File-leaders* The *Reer Halfe-files* in like manner, and at the ſame time Countermarch to the Right, following the *Halfe-file leaders*, every *File-leader* falling directly after his *Bringer up*. Chorean,

For *Reducement*, Countermarch *Front* and *Reer* into the *midſt*; then *face* to the firſt *Front*, and they are as at firſt. *Reducement.*

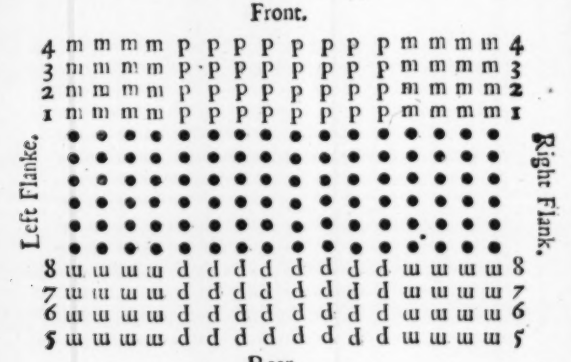
Sometimes occaſion may require a *part* Countermarch, as when the *Front Half files*, *Reer Half-files*, *Half-ranks* of the Right, *Half-ranks* of the Left, or any other part of the *Body* (more or leſſe) doth Countermarch to either hand, not intermixing with the ſtanding part of the *Body*: and theſe Part-Countermarches may be performed either after the *Chorean*, *Lacedemonian*, or *Macedonian* way: nevertheleſſe, I willingly forbeare to enlarge my ſelfe; rather with the dogs of *Nile* run and lap, giving onely a touch of theſe things, and away; leaving others more amply to proceed that ſhall affect more curioſity; whilſt I proceed to the next Chapter and Countermarch. *Part Countermarches.*

Chap. 49. *A Diviſionall Countermarch to make a large Intervall between the firſt and laſt rank.*

THis *Diviſionall Lacedemonian* Countermarch makes ſemblance of charging or falling on to the *front* and *reer*, leaving all the ground which was occupied by the Souldiers between *front* and *reer*; transferring them into the ground before the *front*, and behind the *reer*. The ground (or place) of the former ſtanding, by this *Motion* becomming vacant; which I have demonſtrated in the Figure by the *pricks*. This Countermarch notwithſtanding that it beare the name of the *Lacedemon*, yet the *motion* of the *Front Halfe-files* is after the manner of the *Baſtard* Countermarch; that of the *Reer Halfe-files* onely being after the *Spartan guiſe*. The *Command*, *Direction*, and *Figure* are as followeth.

The Command is, *File-leaders and Bringers up ſtand, the reſt paſſe through to the right, and place your ſelves before your leaders, and bringers up.* *Lacedemonian.*

The Direction is, *Halfe-files face to the reer.*



The way to performe this *Motion* is as followeth. The *Halfe-files* are commanded to *face* to the *reer*; and then the *Front Halfe-files* paſſe through to the right; placing themſelves before their *leaders*; the ſecond *ranke* before the firſt, the third before the ſecond, the fourth before the third; the *reer half-files* at the ſame inſtant paſſing through to the *reer* after the ſame manner, and placing themſelves before their *Bringers up*. You may perceive by the *Figures* of *Number*, placed on the *flanks* of the *Figure* of *Battell*, both how the men ſtood before the *Motion* began, as alſo, how, and in what place they ſtand, the *Motion being ended*. For the *reducement*, if you have not cloſed their *diſtance*, you may *face* them *about*, and ſo let them paſſe againe into their places: Or elſe, by doing the ſame Countermarch over againe, or to the contrary hand, or any ſuch like way, will *reduce* them. This next following Countermarch will alſo *reduce* them, or this will *reduce* that. The *Command* and *Direction* is, as you ſhall find it placed over the *Front* of the *Figure*.

If you reduce them by another Countermarch, firſt cloſe your diviſions.

Chap. 50. *Of making a large intervall between the firſt and laſt ranks, by the Macedonian Countermarch.*

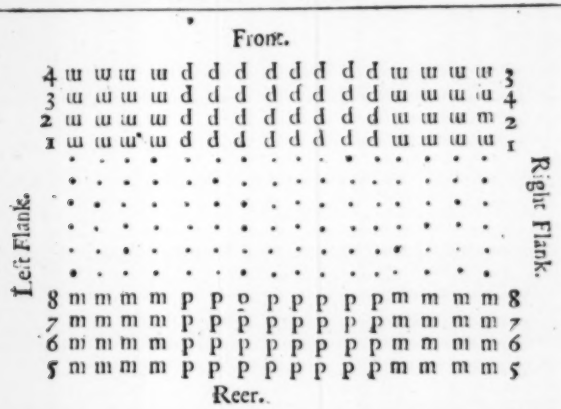
Macedonian.

THis *diviſionall Macedonian Countermarch*, is little different from that next before it, only the other, turned the *Aſpect outward*, to the *front and reer*; this *Countermarch turns the Aſpect inwards towards the midſt*. It may be uſefull, if the *Commander* would ſhew or publiſh ought, before his beſt Souldiers, for that it not only leaves a large *diſtance*, but that it brings the beſt Souldiers into the *midſt*, with their *aſpects* directed *inwards*: It may alſo ſerve to conduct any great *Perſonage* croſſe the length of your *Battell*, whereby to ſhew them the *bravery* of your Souldiers, &c. The *figure* followeth.

The Command is, *File-leaders face about, Bringers up ſtand, the reſt paſſe through to the right, and place your ſelves behind your File-leaders and Bringers up.*

The Direction is, *Halfe-files face to the reer.*

Front.



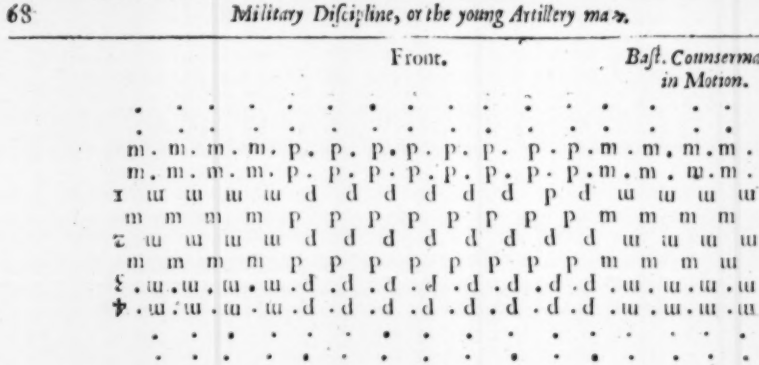
The *Motion* of this Countermarch may be thus performed: The *firſt rank* (or *file-leaders face about*, the *laſt ranke ſtands*, the *Reer Halfe-files face about*, and ſo the *Front diviſion* paſſe forwards, and place themſelves behind the *file-leaders*, the *Reer half-files* behind their *Bringers up*. The manner you may perceive the plainer, if you note the *Figures* of *Number*, which are placed on the *flanks* of the *figure*, their *Number* ſhewing the *places* they had from the *front* before the *motion* began. This *Figure* may be reduced, either by the ſame word of *Command* which produced it, or elſe by any of the foregoing *diviſionall Countermarches*. Our next ſhall be a *Countermarch* of exchange of ground. The words for *Command* and *Direction*, follow in the next Chapter.

Note that when the Reer Halfe-files face about, the laſt ranke, which are the bringers up are ſtill to keep their ſtanding.

Chap. 51. *Of interchanging ground.*

THis *interchanging of ground*, or *Baſtard* Countermarch, may not rightly be ſaid to be derived from any one of the particular grounds of Countermarch; but rather participating of them all; And yet conſidering it actually performed, it is different from them all: for whereas the other Countermarches of *files* in *diviſion*, although they bring the *Front* and *Reer* into the *middeſt*, yet the *Front Halfe-files* continue ſtill on the ſame part, and the *Reer Halfe-files* doe not alter into the places of the other. But this, contrary to any other of the *diviſionall Countermarches*, transfers the *Front Half-files* into the ground or place of the *Reer Halfe-files*; and them into the contrary part, bringing the *File-leaders* and *Bringers up* together into the *midſt*. The following *Figure* demonſtrates the *Body* in *motion*.

The Command is, *Front and Reer Halfe-files interchange ground.*
The Direction is, *Front Halfe-files face to the Reer, then both Diviſions move ſtraight forwards to the right.*



The way to performe this *motion* is as followeth. The *Front Halfe-files fac^e about*, passing forward to the Right (being led by the *Bringers up* of the *Front Halfe-files*) between the *Intervals* toward the *Reer*; The *Reer Halfe-files* at the same instant in like manner Marching forwards between the *Intervals*, on their right hands into the *Front*, untill the *Front division* have attained the places of the *Reer*, and they contrariwise, the *places* of the *Front*. For the *Reducement* of this Countermarch, doe as much back againe, Or if you would *reduce* it some other way, you may first make an intire Countermarch of *files*, and then Countermarch *Front* and *Reer*, into the *midst*; for under two Countermarches, it will not be *reduced*. Now I will passe to shew *divisionall* Countermaches of *ranks* or *flanks*; The first shall be *Choreans*; as in the chapter following.

Reducement.

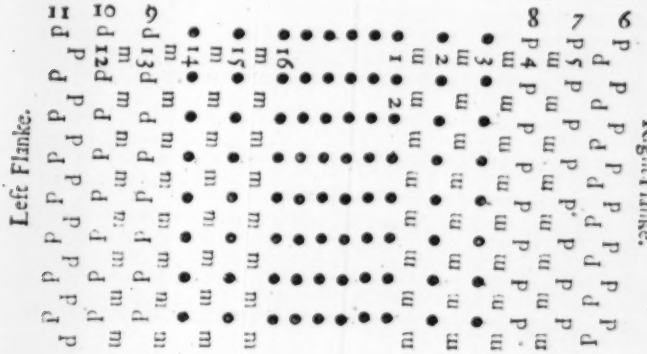
Chap. 52. *Of Countermarching the flanks (or wings) into the midst of the Battell.*

THis *Choreon* Countermarch of the *Wings* (or *flanks*) into the *midst* is ordinarily used when the *Commander* would bring the light armed into the *midst* of the *Battell*, to secure them from the incursions of the *Horse*. It is a *Motion* too dangerous to meddle withall in the eye of the Enemy, although the Souldiers be expert; but by no meanes to be thought upon in the field, amongst the untrained and unskilfull. This Countermarch performes the *Motion* on the same ground. The *Figure* followeth.

The Command is, *Countermarch your flanks into the midst.*
The Direction is, *Face to the Right and Left.*

Front.

Clorean. Front.



The *command* being given, the whole *body faceth* to the *right* and *left* by *division*, the outermoſt *files* by this *facing* becoming *ranks*, every man in the *right hand file* being a *leader* to his *half rank file-wiſe*, and ſo likewiſe in the *left hand file* the ſame, then they *counter-march* the *right flank* to the *right*, the *left flank* to the *left*, which you muſt alwaies obſerve to doe, and your *flankers* will meet juſt in the *midſt* of your *Battalia*; laſtly, having *faced* them to their *firſt front*, the *counter-march* is ended.

To *Reduce* them, they may either uſe the ſame *Counter-march* againe, or any of theſe following *two ſmall counter-marches* of *Flanks*, (unleſſe it be that of *interchanging* of *ground*.) The next ſhall be *Lacedæmonian*, the Command and words of Direction are, as in the Chapter following.

Note that upon the Counter-marching of flanks into the midſt, the right flank muſt alwaies obſerve to turne to the right, the left flank to the left, for if they ſhould both turne off to the right they will never meet right, if they turne off both to the left it will be as bad.

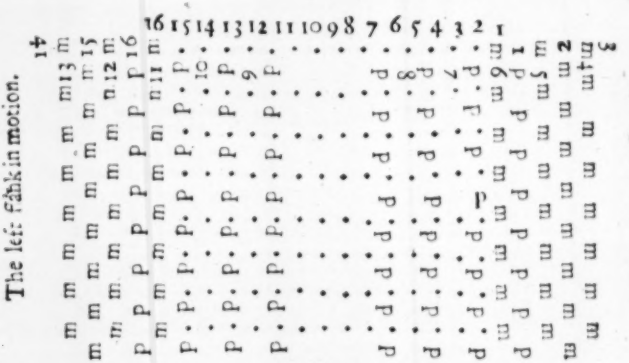
Chap. 53. *Of Counter-marching to take the ground on the outſide of the Flanks, the faces outward.*

THis *Lacedæmonian Counter-march* of *halfe ranks* or *flanks* make ſemblance of charging on, and iſſuing forth upon both *flanks*, but leaves a large waſte diſtance of ground, unoccupied between the two outmoſt *Files*, or midſt of the *Battaile*. The *figure* followeth.

The command is, *The outermoſt file of each flanke face outward, the reſt paſſe through to the right and left, placing your ſelves before your out-ſide men.*

The direction is, *Face to the right and left.*

Lacedemonian. Front.



Reere.

The way to performe this *motion* is as followeth. The *right hand file faceth* to the *right*, the *left hand file* to the *left*, the reſt of the *body faceth* to the *right* and *left*, the *right flank* paſſing through to the *right*, and placing themſelves before their *right hand men*. The *ſecond file* from the *right* begins the *motion* on the *right flanke*, the *left flank* in like manner, paſſing through to the *left*, and placing themſelves before their *left hand men*, the *ſecond file* accounting from the *left*, begins the *motion* on the *left flank*, but you muſt note that the *files* become *ranks* with the *facing*.

Reducement. For the *Reducement* of this *figure*, if you will firſt *face* them to their proper *front*, you may then command the two *inmoſt files ſtand*, the reſt paſſe through to the *right* and *left* inward and take their *places*; or, if you pleaſe, make uſe either of a *Chorean* or a *Macedonian counter-march* of *ranks* by *diviſion*, and with a *facing* and *cloſing* their *diviſions*, they will be perfectly *Reduced*.

Chap. 54. *Of Counter-marching to take the ground on the outſide of the flanks, and to direct their aſpects inward.*

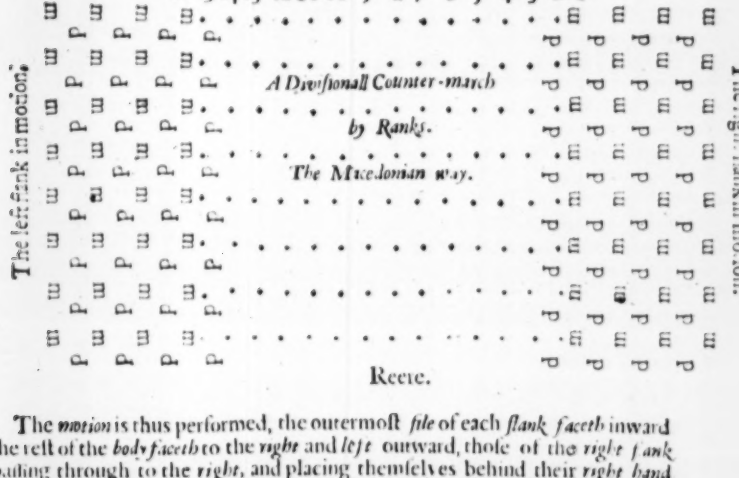
THis *diviſionall Macedonian Counter-march* differeth little from the *Counter-march* of the laſt Chapter, except it be in the alteration of the *aſpect*, for whereas the laſt *Counter-march* turned the *Fronts* of each *flank* outward, this contrariwiſe directeth them inwards, cauſing each *flank* to confront the other in *oppoſition*. The *Figure* followeth.

The command is, *The outmoſt file of each flank face inward, the reſt paſſe through to the right and left, placing your ſelves behind your outſide men.*

The direction is, *Face to the right and left.*

Macedonian.

Macedonian. Front.



The *motion* is thus performed, the outermoſt *file* of each *flank faceth* inward the reſt of the *body faceth* to the *right* and *left* outward, thoſe of the *right flank* paſſing through to the *right*, and placing themſelves behind their *right hand men*, thoſe of the *left flank* paſſing through to the *left*, and placing themſelves behind their *left hand men*: the *motion* is begun by the ſecond *file* from each *flank*. I might here ſhew theſe *Counter-marches*, beginning their *motion* from their middlemoſt *files*, but I am willingly ſilent, hoping that theſe may ſuffice to the courteous, not much forcing my ſelfe to give ſatisfaction to the curious. For the *Reducement* of this *Counter-march* having *faced* them to their *firſt front*, you may if you pleaſe, command the two innermoſt *files* to *face outward*, the reſt paſſe through to the *right* and *left inward*, placing themſelves behind their *right* and *left hand men*, which being done, the whole *body* will ſtand *faced* to the *right* and *left outward*; then being *faced* to their *leader*, they are *Reduced*. If you would *reduce* it by ſome other way, you may make uſe either of the *Counter-march*, which is next before, or of that which next followeth; or of any other *diviſionall counter-march* of *ranks*, (which doth not *interchange ground*,) Our next two which follow will be *Baſtard Counter-marches*, with the which wee will conclude this our *fourth branch of Diſcipline*. *The Reducement.*

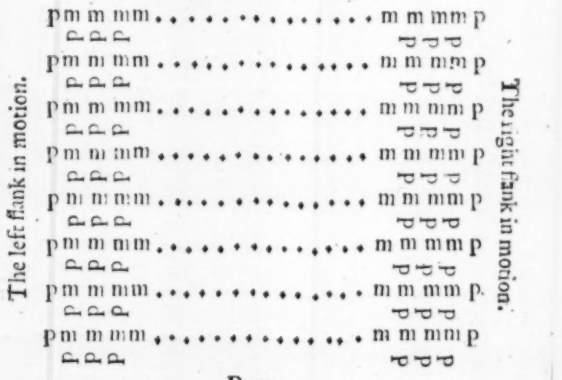
Chap. 55. *Of taking the ground on the outſide of the flanke, not altering the aſpects.*

THis *diviſionall Baſtard Counter-march* produceth the ſame effect which the other two next before it wrought, onely differing in the *aſpect*, for the *Lacedemonian* turned the *aſpect outward*, the *Macedonian* turned the *aſpect inward*; and this keeps the *aſpect* ſtill directed the ſame way. He that knows every way, may when time ſerves, make uſe of thoſe wayes which are moſt neceſſary and

and ſutable to this preſent occaſion, and the Proverbe ſaith, *Knowledge is no burthen.* The *Figure* followeth.

The command is, *The outmoſt file of each flank ſtand, the reſt paſſe through to the right and left, and place your ſelves on the outſide of your right and left hand men.*

The direction is, *Face to the right and left.*



The way to performe this Counter-march is as followeth (according to the command) the outmoſt *file* of each *flanke ſtands*, the reſt of the *body faceth* to the *right* and *left* outward, the right *flank* paſſing through to the *right*, the left *flank* to the *left*, thoſe of the right *flank* placing themſelves on the outſide of the *right hand men*; in like manner, thoſe on the left *flank* placing themſelves on the outſide of their *left hand men.*

The Reducement. It may be *Reduced*, either by any of the foregoing *diviſionall counter-marches* of *ranks*, or elſe being *faced* to any of the *flanks*, then the *ranks* become *files*; and by *diviſionall counter-marches* of *files* you may *reduce diviſionall counter-marches* of *ranks*, or by *Ranks*, *files*; onely you muſt obſerve ſome *facings*; yet for this *figure*, if you pleaſe, *Command the two innermoſt files ſtand, the reſt face to the right and left inward, and ſo march into their places.* The next ſhall be a *counter-march* of *interchanging* of *flanks.*

Chap. 46. *Of interchanging ground by the Flanks, and bringinging the innermoſt file of Pikes, to become the outmoſt Ranks.*

THis *exchanging* of *flanks* is a *baſtard counter-march*, but difiering from all the other *diviſionall counter-marches* of *ranks*, for this transferres the right *flank* into

into the place of the *left*, and the *left* to the place of the *right*. It is very apt to receive a *charge* from the *Horſe*, for as ſoone as they ſhall be commanded to interchange their *flanks*, they *face* to the *right* and *left inward*, and then the *innermoſt files* of *Pikes* begins the *motion*, the reſt of each *flank* following orderly *file-wiſt*, the *Pikes parting* ſo ſoone as they begin to *move*, and *charge* as they ſee occaſion: if need be, the *Pikes* may *charge* at the *Foot*, and the *Musketticrs give fire over them*: If any object that the *Pikes* will have too large a *diſtance*, they may *cloſe* at their owne pleaſure ſo ſoone as they have *paſt through*. The *Figure* followeth.

Note, that if you pleaſe you may paſſe the Pikes alone through, and let the Muſkettiers ſtand, but then there will be a large diſtance betweene the Muſkettiers in the midſt.

The command is, *Interchange flanks*. The direction is, *Face to the right and left inward, and march.*

Front before the interchange.

Reere.

For the *Reducement*, you may if you pleaſe, *interchange* ground againe, nevertheleſſe, if you would *reduce* it by ſome other way, *Counter-march* your *flanks* into the *midſt*, and then an *intire counter-march* either of *rank* or *file* will *reduce* them.

I might have further enlarged my ſelfe upon this ſubject both in command and *figure*, but it may be that ſome will finde fault with theſe which I have already penned, concluding them for niceties and for no ſervice, becauſe they cannot preſently apprehend for what uſe or ſervice they may be fit. Notwithſtanding, I will intreat ſuch if any ſuch happen to be my overlookers) that they would ſuſpend their cenſures, untill they have fully informed their judgements: Yet thus much I will conclude with them, that *Counter-marches* might the beſt be ſpared of all the *motions*, as being leaſt beneficiall to this our *moderne diſcipline*; and yet to very good uſe many of them might ſerve if our Souldiers were well practiſed in them: nevertheleſſe, ſuch is the wilfull ſtupidity of the times, that many good and uſefull things are diſ-reputed and accounted

Counter-marches leaſt uſefull in the moderne diſcipline.

Practice brings perfection. The ignorant have beene alwayes the greateſt oppugners & traducers of the skilfull.

counted of no uſe, becauſe the Souldiers wanting skill, cannot performe them as they ought, which, would the *Officers* take more paines by often inſtructing their Souldiers, the hardeſt *motions* would become facile and eaſie; and to ſay truth, the greateſt fault is want of skill in thoſe which ſhould give inſtruction to others, and yet they will not ſtick to carp at ſuch as ſhall ſhew more then they, concluding ſuch things for ſuperfluous and improper, which they themſelves do not rightly underſtand, but leſt I be taxed for digreſſion, I will conclude this *branch* of *Diſcipline* with theſe few lines following.

Some burthened are with more Command then Skill,
Which had they power ſuting to their mind,
You then ſhould ſee reaſon inthrall'd to will,
Nor any 'bove their knowledge ſhould you find;
For rather then they'l ſtudy to learn better,
They wiſh all wanting, none to know a letter.

So be there many Officers in Bands,
That neither know themſelves, nor care for thoſe
That skilfull are in Poſtures and Commands,
Nor are they carefull which end formoſt goes.
They think to dice, to drab, to ſweare and ſwill,
Is skill enough for them, learn more that will,

And if that any man more forward be,
For to inſtruct the Souldier (as it fit)
With ſuch a fellow they cannot agree,
He is vain-glorious, ſtrives to ſhew his wit,
They will be ſure to quarrell and deprave him,
And in their cups perhaps they'l———

Such honeſt hearts as ſpend both meanes and time,
To practiſe others for their Countries good;
Why ſhould this good be counted for a crime,
To thoſe that for their Prince would ſpend their blood?
That Countrey ſure will beſt be kept from harmes,
Whoſe Subjects pleaſure take to practiſe Armes.

But on this Subject I'l no longer bide,
Of Counter-marches here I'l take my leave.
To ſhew the Wheelings next I ſhall provide,
Which followes next of courſe, as I conceive.
And though with Verſe my Counter-marches cloſe,
Beginning Wheelings, I returne to Proſe.

Chap. 47. *Of Wheelings, their kinds and uſes, with their ſeverall words of Command.*

THe next Branch ſpringing from this *Military roote* is *Wheelings*, which are of two kinds, *viz*. *Wheelings Angular*, and *Wheelings on the Center*, alſo be pleaſed to take notice, that all of them are either *Intire* or *Diviſionall*: the uſe of *Intire wheelings* is to turne the *aſpect* of the *front proper* to the *right*, to the *left*, or *reer*; either for the *gaining* of *Wind*, *Sunne*, or ſome ſuch like advantage, or to confront the *Enemy* with their beſt Souldiers. Moſt of the *Diviſionall wheelings*, being indeed more properly *doublings*, either extending the *length* or *depth* of the Battell; notwithſtanding, becauſe I would not be taxed with innovation or alteration, I have according to the uſuall received way placed them amongſt the *wheelings*, and now I will ſhew their words of *Command* or *Direction*; but before I enter upon them, give me leave to lay downe an obſervation or two for the better inſtruction of the Souldiers in their *wheelings*. The firſt is, that before you enter upon your *wheelings*, you *cloſe* both *ranks* and *files* to their *order*, which is *three foot* both in *rank* and *file*: The other, that upon all *wheelings* you muſt be ſure to obſerve your *leader* and follow him, keeping your due *diſtance*, your *Muſkettiers* being all either *poyzed* or *ſhouldered*, your *Pikes* ought to be *advanced*. The words of *Command* are as followeth,

Wheele your Battell to the
- *Right*, *Left*, *Right*, *Left* } *about*.
- *Right*, *Left*, *Right*, *Left* } *about* — *one the ſame ground*.

Wheele
- *off your Front by Diviſion*.
- *your Front inward to the Reere*.
- *Front and Reere into the* { *Right* / *Left* } *Flanke*.
- *your Flanks into the* { *Front* / *Reere* }.
- *Both Flanks into the Front and Reere*.
- *Your Front and Reere into both Flanks*.

Obſerve that the firſt foure *wheelings* are *angular*, the next foure are *wheelings on the Center*, or more properly, on the midſt of the *Front*; but all the firſt eight be *intire*, the latter eight are all *diviſionall*. You may alſo obſerve, that every following *wheeling* is a *Reducement* unto that which is placed next before it, and the *wheeling* next before may *reduce* that next following, as to *wheele* your *flanks* into the *front*, if you *wheele your flanks* into the *reer*, it is *reduced*, or to *wheel front* and *reer* into both *flanks*, if you *wheele* both *flanks* into the *front* and *reer*, they are likewiſe *reduced* as before.

Moſt of the diviſionall wheelings are doublings.

Note, that the diſtance for wheelings ought to be three foot between rank and file.

Note, that upon the exerciſe of the motions whether it be diſtance, facings, doublings, countermarches or wheelings, the Muſkettiers ought to be all upon one and the ſame poſition either poyzed or ſhouldered, the Pikes in like manner either ſhouldered or advanced.

Each following wheeling reduceth the former.

For the laſt eight *wheelings* which are *diviſionall*, I will prick for each of them his *figure*. As for the firſt eight which are *intire*, I conceive them ſo eaſie to be underſtood, that I may ſpare the labour, yet I will endeavour to expreſſe them as well as I can in words, and firſt I will begin with the *wheeling angular*, and then with the reſt according to their places, and therefore note, that when you are commanded to *wheele* to the *Right* or *Left*, &c. and no other command added, it is to be underſtood an *Angular wheeling*, and ſo to be performed.

Chap. 58. *Of Wheelings Angular.*

The command is, *Wheele your Battell to the Right.*

1. THis is an *Angular wheeling*, which transferres the *aſpect* or countenance of the *Front proper* into that part which was the right *Flanke*; It alſo remooves the *Battalia* from the *ground* whereon formerly it ſtood, and placeth it on that part before the *Front*, the *hinge* or *Axeltree* of the *motion* is the *right corner man*, or *right hand file leader*, who with a ſmall *motion* moveth to the *right*, every man, the more his place is remote from the right *Angle*, the more ſwift muſt be his *motion*, becauſe his *arch-quadrant* or *ſemi-circle* is larger in proportion; wherefore it muſt be the diſcretion of the *Officers* ſo to inſtruct their *Souldiers*, that when they *wheele* to any *hand*, they may ſo moderate their *motion*, that they on the contrary *flank* be not forced to runne, but ſo orderly to containe themſelves, that they may ſtill preſerve an orderly and even *front*.

Obſerve the direction for angular wheelings.

For the *Reducement*, *wheele* your *Battaile* to the *left* in the like manner as it was *wheeled* to the *right*; nevertheleſſe, you muſt note, that it will not bring you back into the ſame ground you formerly ſtood on, for it hath advanced you the length of your *Battalia* before the place of your *firſt front*.

2. But if you would be *Reduced* into the ſame *place* or *plot* you firſt ſtood on, then *face* your *Battell* to the *right*, and being ſo *faced*, *wheele* your *Battell* to the *left*, which being performed, *face* to the *left*, and then they are compleatly *Reduced*, both for *aſpect* and *place*. The next Command is, *Wheele your Battell to the right about.*

Note the Reducement to the firſt place and aſpect.

3. This is alſo an *angular wheeling*, and transferres the *aſpect* of the *front proper* towards the *Rere*; it is to be performed in the ſame manner as the *wheeling* to the *right* was, onely the *motion* is twice ſo much; wherefore there ought to be the more care had, that ſo the *motion* may be orderly performed, for by ſo much as every man is neerer or further off from the *right corner man*, by ſo much the more ſwift or *ſlow* muſt he continue his *motion*, that ſo he may be ſure to keepe ſtill *even in rank* with his *right hand man*. This *motion* being thus performed, you *Battell* will be removed from its former *ſtation*, taking in lieu thereof the ground *Diagonally* oppoſite to the *right Angle*.

Note that wheelings to the right about, will not be reduced by wheeling back againe to the left about juſt into the ſame ground if the wheeling be Angular, but will be twice the length of the Battell removed to the right of your former ſtanding.

To

To reduce theſe to their former *Aſpect*, *wheel* your *Battell* to the *left about*, notwithſtanding the ground you formerly did poſſeſſe, will be twice the length of your *Battell*, to the *left*, of your *left flank*, if you would *reduce* them, as well to their firſt *ground*, as their firſt *aſpect*, face them to the *right*, and then *wheel* them to the *left about*, which being done, face them to the left, and they are perfectly *reduced*, as at firſt. But the neereſt reducement of *aſpect* and *place* is; if you *wheel* to the *right about* then *wheer* to the *right about* again for *reducement*. If to the *left about*, then to the *left about* in like manner. 4.

Chap. 59. *Of wheeling on the Center.*

The Command is, *Wheel your Battell to the right on the ſame ground.*

THis *wheeling* is by ſome called, *a wheeling the Center*; by others, *a wheeling on the ſame ground*, I cannot abſolutely maintaine it to be either, for that it onely wheeles about the *midſt* of the *firſt ranke*. Neither may it rightly be termed a wheeling on the ſame ground, becauſe it loſeth the fourth part of three it formerly ſtood upon. This wheeling is quicker performed, then the *angular wheelings*: and may be done in farre leſſe ground. For the *left flank* advanceth forward, ſtill wheeling to the *right*, the *right flanke* contrariwiſe, facing to the *left*; and ſo falling backward. If you have an odde file, then the *middle file-leader* muſt be the *Center* or *axeltree* of the Motion, if you have an even number of *files*, then the *middlemoſt file-leader* from the *left*. But if your wheeling be to the *left*, then the contrary. This by ſome is called the *Prince of Oranges wheeling*. For the *reducement*, wheel your *Battell* the *left*, on the ſame ground: and they are reduced as at firſt. Our next *Command* is, to

Wheeling on the ſame ground quicklier performed, then angular wheelings, and and in leſſe roome.

6. *Reducement.*

Wheel your Battell to the right about, on the ſame ground.

This *wheeling* is alſo a *wheeling on the Center*, or *midſt of the Front*: and *tranſferres* the *Aſpect* of the *Front proper*, towards the *Rer*, removing the Battell from the ground whereon it formerly ſtood, and placing it on the ground before the former Front. It is performed after the ſame manner, as the laſt: only the Motion is double ſo much as the other. In this Motion, on the *left flanke*; every man is to obſerve his *right-hand-man*; and the *right flanke* muſt keep even after their *left-hand-men*, which become their *leaders file-wiſe*, untill they have attained their *ground*: after which, they *face* as before, making an *even Front*. For the *reducement*, *wheel* your Battell to the *left about*, upon the ſame ground; and they will be *reduced* as at firſt. I will next ſhew the *diviſionall wheelings*, and intend to give to each of them his *figure*: whereby they may appeare the more eaſie to ſuch as doe not yet rightly underſtand them. The firſt ſhall be a *wheeling off by diviſion*: as in the next Chapter.

7. *Reducement.*

Chap. 60. *Wheeling off the Battell by diviſion.*

THis *wheeling off by diviſion* in greater *Bodies*, may be uſefull to meet ſeverall enemies at one and the ſame time with the *Front of your Battalia*: and ſo conſequently with your *beſt Souldiers*. By this *Motion* alſo the *Muſketiers marching in Front*, may bee *wheeled* off by *diviſion*, to *flanke* their *Pikes*: But if you would *wheel off* your *Battell* by *diviſion*, and again conjoyn them, when the *file-*

leaders are come to the *reer*) then it brings all your *Muſketiers* from the *flanks* to the *midſt* of your *Battalia*: and the *Pikes* on the *outſide* or *flanks*. If any queſtion the *depth* of the *Number* of this *Figure*, I have *doubled files* to make the *Figure* more perfect, as you may perceive by the following *Figures*.

The Command is, *Wheel off your Front by Diviſion*.

First Front.

Reer.

Note the direction, the wheeling is angular, the Motion to be performed, wheeling about the outmoſt File-leader on each Flanke.

The way to performe this *Motion*, is eaſie: for all the *file-leaders* of the *right flanke*, *wheele about to the right*: the reſt of each *file* following their *leaders*: the *File-leaders* alſo of the *left flanke wheeling about to the left*, in the ſame manner; and then *joyne* or *cloſe* their *diviſions*. This being done, if you would then *reduce* them, *wheel* them off againe by *Diviſion*, after the ſame manner; and they will be as before. But if you would doe it ſome other way, make uſe of this *wheeling* next following: which will alſo bring them as they were. The word of *Command*, or direction followeth, as in the next Chapter.

Chap. 61. *Of wheeling the Front inward towards the Reer.*

WHeeling your Front towards the Reer, is here placed as a *Reducement* unto the preceding *wheeling*: and brings the *Muſketiers* to the *Flanks* againe. Nevertheleſſe if you would doe it, the Company being firſt *reduced*; then it brings the *Pikes* to the *Flankers*. Some have conceived that it may prove uſefull at any time, when your *Reer* ſhall bee too much *overlaid by the enemies Cavalrie*: having firſt gained ſome *hill ſide*, or other place of *advantage*, for then by this *wheeling* of your *Front inward* to the *Reer*, which to the *enemy* will make ſhew of *diſbanding* or *flight*: But to the contrary,

trary,) your *Battell marcheth* towards them, with *a ſetled* and *orderly Body* with all your *Muſke-teers* in the *midſt*. In that *Order* ſpring upon the *enemy*; the *Pikes* being the *Flanquers*: thereby defending the ranks of your *ſhot* from the *fury* of the *Horſe*. The *Figure* as in motion followeth.

The Command is, *Wheel your Front inward to the Reer.*

This *Motion* will hardly bee well done, if your *Body* hold too large an extenſion of *length*. But at what depth ſoever it is eaſie. The *Motion* is to bee performed as followeth. The *right-hand file-leader*, with all the *leaders* of the *right flanke advance forwards*, and ſo *wheel* about to the *left*: every *file* ſtill keeping cloſe to their *right-hand file*. The *left-hand-file-leader*, likewiſe, with all the *leaders* of the *left flanke, advance forwards*, and *wheel about* to the right: every *file* of the *left flanke cloſing cloſe* to the *left*. Thus the *outmoſt files* of each *flanke*, will meet and become the *innermoſt*: the *Front* falling *perpendicularly* to the *Reere*. For the *Reducement* of this *Figure*, you may if you pleaſe, either *wheele* them off to the *right* and *left*, by *diviſion*: or elſe *wheel* your *Front inward* againe to the *Reere*. Theſe two laſt *wheelings* have been demonſtrated with their *files doubled* whereby the *Figures* might bee the more perfect, but with men it would have been needleſſe: wherefore *double ranks* to the contrary *hand*, and they will be as as at the firſt.

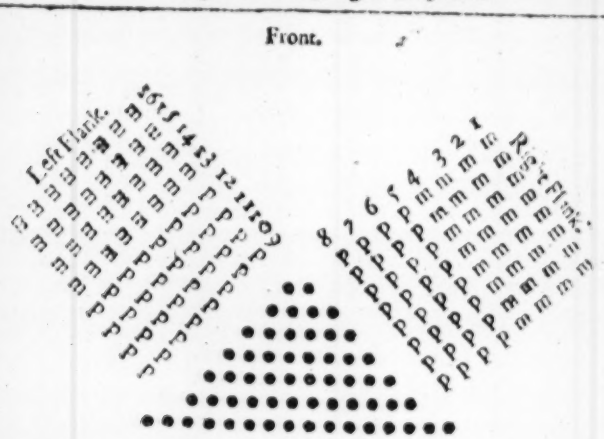
The inſtruction how to performe the Motion.

Reducement.

Chap. 62. *Of bringing the Flankes into the Front of the Battell.*

The Command is, *Wheel your Flanks into the Front.*
The Direction is, *Follow your Leaders.*

Front



Wheele your { Flanks, Wings, Front, Front, Reer } into the { Front, Front, Battell, Midſt, Center, Flank. }

This wheeling moſt properly a doubling.

THis *diviſionall wheeling of the Flanks into the Front*, is properly, a *doubling* performed by *wheeling*. It brings all your *Muſkettiers* from the *Flanks* into the *Front*. So that whereas this *Body*, before, could doe Execution, but with eight *Muſkettiers*, at once; by this *Motion* they may powre on ſixteen *ſhot* together. If they were *deeper*, before the *Motion* began; then it would bring the more hands to imployment. If upon ſome *paſſe* you ſhould bee chaſed in the *Reer* by *Horſe*; by this Motion of *wheeling* your *flanks* into the *Front*, you not onely ſecure your *Muſkettiers*, but alſo *barricado up* the *paſſage* with your *Pikes*; provided it be not above fifty foot over. Some call this, a *wheeling on the center*: becauſe they *wheel about* the *middle men* of the Front. But I rather conceive it an *angular*; becauſe upon the firſt Motion of *dividing*, every *diviſion wheeleth about* his own *angle*, untill the *outmoſt file-leaders* of each *flanke*, meet together in the *midſt*. You may perceive how, by the *Figures* of *Number*, where the *Figure* 1, meets the *Number* 16. 2. with 15. 3. with 14. and ſo for all the reſt. Then being *faced* to their *leader*, every two *files* that met, being now *joyned*, make one *ranke*. There muſt be the like *order* and *Decorum* kept, in the Motion of *wheeling* each *flanke*: as I ſhewed in the inſtruction of intire *angular wheelings*. For *reducement* of this Motion, *wheel* your *flanks* into the *Reer*. Or elſe, foure times the ſame, as I have ſeen ſome doe: although ſomewhat the further way about. Divers men are diverſly opinionated; concerning the beſt word of *Command*.

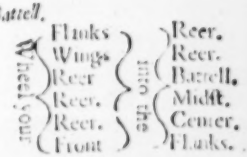
Sixteen abreſt allowing to each man 3 foot amounts to 48 foot.

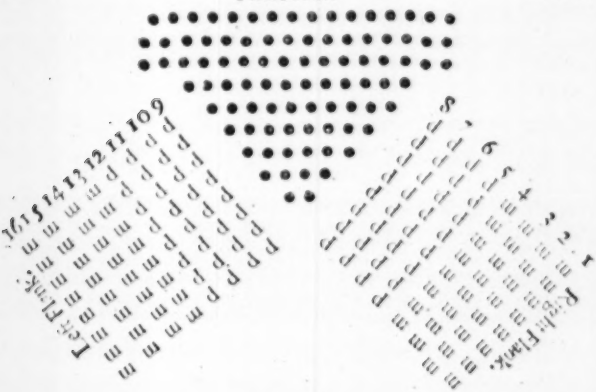
The Reducement.

mand or direction for this Motion. These I have knowne used which I have placed in the *Margin*, by the *figure*. And if any man like one better then the other, be it at his owne choice, either to use or refuse, while I passe to shew the next *wheeling*.

Chap. 63. *Of wheeling the Reer into the midst of the Battell.*

The Command is, *Wheel your flanks into the Reer.*
The Direction is, *Face all about to the right, and follow your present leaders.*





THis Divisionall wheeling of the *flanks* into the Reer, is also a doubling, and performed as the other. And whatsoever might be said in the behalfe of the wheeling of the *Front*, into the *middest*; the same may be also spoken concerning the wheeling of the *Reer* into the *middest*. For this wheeling brings your two outmost files to be the first *Rank* to the Reer; the bringers up of the right and left-hand-files meeting together: the bringers up of the right flank meeting face to face with the bringers up of the left flank. And so being faced to their Leader, they which before were compleat files, are now become halfe ranks, either to the right or left. But you must note, that before you begin to wheel, you must face your body about to the *Reer*: and then the action will be all one, as if you wheeled your flanks into the *Front*. Wherefore I shall not need further to explaine it, having spoken fully to it in the precedent Chapter.

Upon all wheelings, you must observe to follow your Leaders; which must be understood, as well of those which become leaders accidentally;

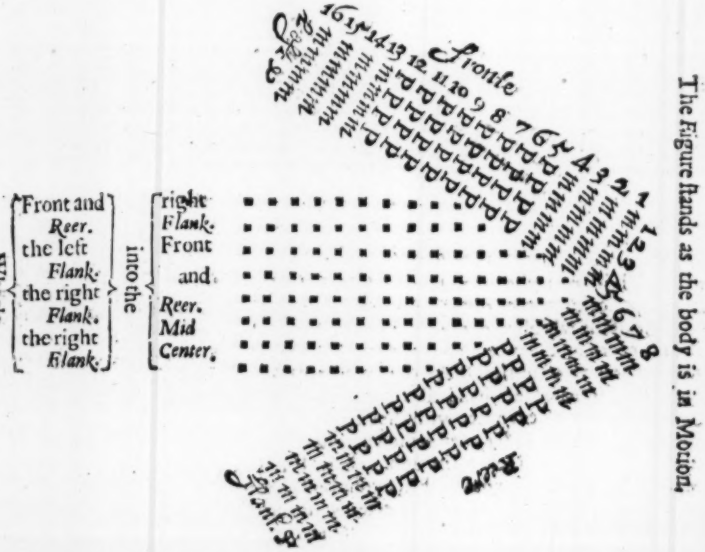
(by reason of facings) as of those which be the first and proper leaders. As in this wheeling, for example: where the bringers up are become the leaders of the Motion.

Note that the two middlemoſt bringers up are the hinges of this wheeling.

For the *Reducement* of this *wheeling*, the *Commander* being at his *Front accidentall*, may command them to *wheel* their *wings* into their *reer*; and ſo paſſe through to that part where his *proper file-leaders* are; and then *face* them to him, and they are are *reduced*. Or elſe, when he hath paſt through to the *reer*, and *faced* his *Company* to him; then his *Pikes* being formoſt, let him *wheel* his *flanks* into the *Front*: when being *faced* to their *leader*, they are *reduced*: For this *motion*, there are alſo divers and ſeverall words of *Command*. And becauſe it may be that ſome will better approve of ſome of the other *words* of *Command*, then of this that I have made uſe of: therefore I have placed others in the margine; that ſo any that will, may take their choice, while I paſſe to ſhew the nexte *wheeling*. Whoſe *word* of *Command* and *direction* you ſhall find over the *figure* of the next *Chapter*.

Chap. 64. *Of wheel the right flanke into the midſt of the Battell.*

The Command is, *Wheeling Front and Reer into the right Flanke.*
The Direction is, *Face all to the right.*



This

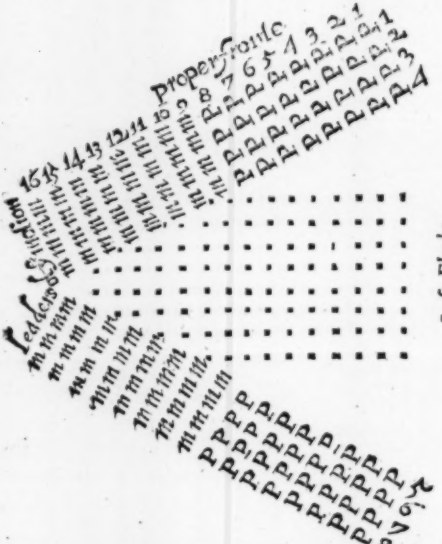
THis *diviſionall wheeling* of the *Front* and *Reer* into the *right flanke*, doth *quadruple* the *depth*; as may appeare by this *figure*; which before the *Motion* began, contained but eight in *depth*: But this *wheeling* being perfected, makes them 32. namely, if you direct the *aſpect* of the *body* either to the *right* or *left*, after the *Motion* is ended. If you obſerve this *wheeling*, it doth divide the *Muskettiers*, on the *left flanke*; the one *halfe* of them *wheeling* to the *Front*, the other halfe to the *Reer*: all the *Muskettiers* of the *right flanke*, *wheeling* together into the *midſt*. The *Pikes* are likewiſe divided; thoſe that were the *Front Halfe-files* are in the *middeſt* of the *Front diviſion* of *Muſquettiers*, and thoſe which were the *Reer diviſion* of *Pikes* are in the *middeſt* of the *Reer diviſion* of *Muſquettiers*. This *wheeling* may bee to ſingular good uſe, for the making of ſome *formes* of *Battell*. But I forbeare now to treat concerning *figures* and *formes* of *Battell*, reſerving them to be ſpoken of in their due places; and come now to ſhew the way how to performe the *Motion*. The *Command* therefore being given, to *wheel Front* and *Reer* into the *right flanke*; then the firſt thing the *Souldiers* are to doe, is to *face* to the *right*. That done, they *wheele* together about the fourth and fifth men in the *right-hand-file*; which is the *Halfe-file-leader* to the *Front*, and *Halfe-file-leader* to the *Reer*. You may eaſily perceive how by the *figure*, where the *Reere diviſion wheeleth* to the *left*, and the *Front diviſion* to the *right*: untill the *bringer up* of the *right-hand-file* meets in the *midſt* with his *file-leader*: the ſecond with the ſeventh; the third with the ſixth; the fourth with the fifth, &c.

For the *reducement* of this *figure* of *wheeling*, there are many waves, according as the *body* may bee *faced*. But firſt conceive them *faced* the ſame way as they were before this *motion* began And then the *wheeling* of *Front* and *Reer* into the *left flanke* will *reduce* them, when they are *faced* to their *leader*. Or if you will face them that way which they *wheeled* in the *motion*; which was to the *right*: then *wheel* your *flanks* into the *Reer*; when being *faced* to their *proper front*, they are reduced. And ſo, in likemanner, ſhould you *face* them to ſome other part; they might be otherwiſe *reduced*. The next *wheeling* will bethe ſame to the *left*, as this is to the *right*: where notwithſtanding that the *motion* be all one, yet it ſhall differ in the *plaing* of the *men*. For before I begin the *wheeling*, I will paſſe through all the *Muſquettiers*, from the *left flank* to the *right*: by which meanes the *body* will ſtand, as appeareth by the *ſquare figure* following under *A*. From whence *I* will begin the next *wheeling*.

Note that if the length of your Battell be double the number of your depth, as in this figure; then this wheeling of front and reer into the right or left flanke, doth quadruple their former depth. If the number were equall in length and depth, then by this wheeling they would be but doubled. If the number of your length exceed more, then double your depth, by ſo much the more will the extenſion of the depth be beyond quadruple, &c. Reducement. Wheelings may be diverſly reduced; at the diſcretion of the Commander.

Chap. 65. *Of wheeling the left Flanke into the midst of the Battell.*

The Command is, *Wheel Front and Reer into the left Flanke.*
The Direction is, *Face all to the Left, and move after your present Leaders.*



THis *divisionall wheeling* of *Front* and *Reer* into the *left flanke* is, in like manner, a doubling of the depth. For the nature of the Motion, it is altogether like unto the *wheeling* next before: differing onely in the *Flanke*; and after that the body is faced to the *left*, the *wheeling* is to be performed, as *wheeling* the *Flanks* into the *Front*. But by reason that before the Motion began, all the *Pikes* were on the right Flank, by this *wheeling* they are brought to the *Front* and *Reer*. For the *Aspect* being directed the same way it was before the *Command* was given, the depth will be 32. as in the other *Figure*.

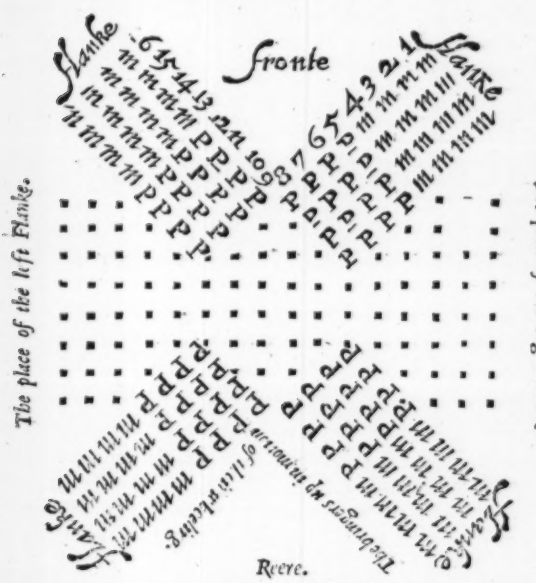
Reducement. For *Reducement*, the ordinary way is to *wheel* the *Front* and *Reer* into the right *Flanke*. Or if upon any occasion you have faced your body to the same way they have *wheeled* (which was to the *left flanke*) and would give your *Command* from thence; Then let them *wheel* their Flanks into the Reerr. This done, the *Commander* passing to his *first Front*, and facing them to him, they are as before this last *wheeling* began. Then cause the foure files *of Musquettiers*, to *face* to the Right: and to passe through to their places. Lastly, doe but *close* them to their due *distance*, in *rank* and *file*; and they are perfectly reduced.

Chap.

Chap. 66. *Of wheeling Front and Reer into the midſt of the Battell.*

The command is, *Wheele both Flanks into the Front and Reer.*

The direction is, *Half-files, face about to the Reer.*



THis *diviſionall wheeling* of both *flanks* into the *front* and *reer*, doth *double* the *depth*, making them from eight *deep* ſixteene. It doth likewiſe transferre the *Muſkettiers* from the *flanks* into the *front* and *reer*, making a *diviſion* between the *front half files* and *reer half files*; ſo that of one *body ſtanke* with *Muſkettiers* it maketh two, each having their *Muſketiers* in *front*.

This *figure* (and moſt others, as well *facings*, *doublings*, *counter-marches* and *wheelings*) are here ſet forth as the *motion* of each preſents it ſelf in the *execution*, few of them being ſhewn as they be when they are *executed*: and I conceive it the better way, not only for direction, but alſo for the apprehenſion of the Learner, to ſhew the work as it is in *doing*, rather then abſolutely *performed*.

For the way how to performe this *wheeling*, take theſe directions following. The *Command* being firſt given as aforeſaid, the firſt thing the Souldiers have to do is for the *half files* to *face about*, and then the *front half files* and *reer half files* *wheel* at one and the ſame time, the *front diviſion wheeling* about their two *inner-* *The direction to this wheeling.*

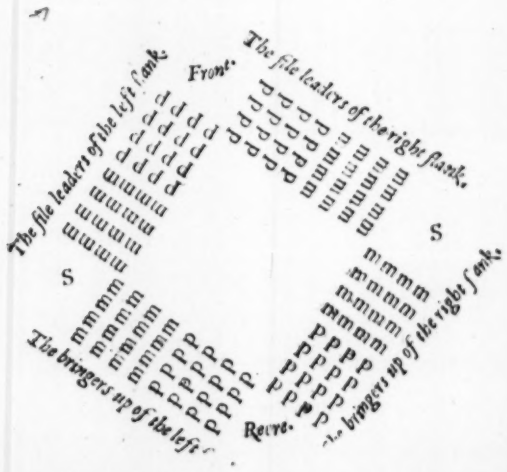
moſt *file-leaders* which are figured with the *numbers* 8 and 9. untill the *file-leaders* of the *right flank* meet together in the midſt with the *file-leaders* of the *left flank* as you may eaſily perceive by the *Figure* ſhewing the motion, the reſt of their *diviſions* orderly following them, the *half-files* alſo being *faced about*, the *bringers up* in like manner *wheele* together, being now the *leaders* of the *motion* in the *reere*, as you may perceive; this being done, if you pleaſe you may *face* them all to their *leader*, (whom ſuppoſe to be at the *place* of his firſt *front*) and then command them to cloſe their *diviſions*; which being performed, all your *file-leaders* are in the two *innermoſt files* of the *front-diviſion file-wiſe*, and all the *bringers up* in the *reer-diviſion* of the ſame *files*.

For the *reducement* of this *wheeling*, if you will *face* them to either of the *flanks*, and command them to *wheele* both *flanks* into the *front* and *reer*, then *face* them againe to their proper *front* and cloſe their *diviſions*, they will be as at firſt; but if you would make uſe of ſome other *wheeling* to *reduce* it, then take this in the following Chapter.

Chap. 67. *Of wheeling the flanks into the midſt of the Battell.*

The command is, *Wheele front and reer into both flanks.*

The direction is, *Face to the right and left, and wheele after your preſent leaders.*



THis *diviſionall wheeling* of the *front* and *reer* into both *flanks* may alſo be termed a *doubling* of the *depth*, by reaſon that from eight *deepe* it maketh *double* the former *number*. By this *motion* alſo, the *Muſketiers* which were before *flankers*, are now transferred into the *midſt*, betweene the *front* and *reer* of the *Pikes*; and whereas in the other *figure* the *wheeling* was about the two *middlemoſt file leaders* and *bringers up*, this *wheeling* contrariwiſe is about the two *half file leaders* of the *outmoſt files* on each *flank*; in the other *wheeling* the *file leaders* and *bringers up* made the *innermoſt files*, in this the *outermoſt file* of each *flanke*, as you may eaſily perceive by the *figure*: this *motion* being performed, leaves a large *interval* (or *diviſion*) from *front* to *reere* between the *flanks*, in the Commander paſſe into the *midſt* betweene each *diviſion* and *face* them all to him, cauſing them to *cloſe* their *diviſions*, and *march* forth into his *firſt place*, (directing their *aſpects* the ſame way) then will the *Pikes* be in the *Front* and *Reer*.

Reducements.

For the *Reducement* of this *Figure* (of *wheeling*) to its former *poſture*, you may *face* the *body* to one of the *flanks*; which being done, command them againe to *wheele Front* and *Reer* into both *Flanks*, when being *faced* to their former *Front* and having *cloſed* their *Diviſion*, they are *Reduced*: nevertheleſſe, if you would make uſe of ſome other *wheeling* to *reduce* them, then *wheele* both *Flanks* into the *Front* and *Reer* and they will be as at *firſt*, after that they have *faced* to the *leader* and *cloſed* their *Diviſions*.

Thus as briefly and as plainly as I could have I run through the ſeverall *motions* and *grounds* for the *diſciplining* of a *Foot Company*; and although I neither can, nor hope to give ſatisfaction to all, yet I ſhall intreat the better qualified, that where I am wanting, there they will ſupply my defects with their goodneſſe; or if it ſo happen, that I undergoe the cenſure of needleſſe ſuperfluity, I would have ſuch to make uſe of ſo much of it as they ſhall think fit for their owne turnes, and leave the reſidue unto ſuch as may have opportunity for to uſe it.

THus Courteous Reader have I paſt the grounds,
And various Motions of the Infantery,
Where thou maiſt gaine the skill, coſt others wounds,
Though from a young one of th' Artillery.
Read and conſider, if thou nothing gain,
I aſk as little from the for my pain.

If thou the Diſtances doſt well peruſe,
The ſeverall Facings, and the Doublings too,
The Counter-marches which of courſe enſues,
And then our Wheelings which we laſtly do.
Theſe being practis'd, learnd, and underſtood,
The benefit turnes to thy Countries good.

Theſe like the vowels, are in number five,
With which we ſpell all words that can be nam'd
So with theſe Motions we all formes contrive,
And from theſe grounds are all our Figures fram'd.

This

Then frame thou no excuſe, but learne to know them,
And with as free an heart as I do ſhew them.

Now next of all I ſhould ſome Firings ſhow,
But leſt perhaps I hold you over long,
I think it fit ſome ſpite to beſtow,
For feare our Souldiers think I do them wrong,
So pleaſe the Reader but to pauſe the while,
And ſee our Leaders exerciſe their Files.

For now each Leader is ſo courteous grown,
He ſtrives to bring another to his place.
But they as modeſtly would keep their own,
And each prefers his follower to the grace.
So pleaſe you then but wink at the digreſſion,
And you ſhall ſee each Leader by ſucceſſion.

Chap. 68. *Of making men File leaders ſucceſſively, the Files being eight deep.*

EVery man may be made *file leader* of his owne *file ſucceſſively* according to his *firſt ſtanding*, aſwell and eaſily in great *Bodies*, as by ſingle *files*; yea and with the ſame words of Command and Direction, as you may perceive by the following Table, where the figures of *number* ſhew the ſucceſſion of each mans *leading*. The words of *Command* which produce each *leader* being placed in the Columes of the following Table. In the firſt Colume the *file ſtands*, each man in his right place, with his proper *file leader* in *front*. The reſt of the *files* demonſtrating the *places* of the men according to their *ſtanding*, upon the making of every ſeverall *file leader*. The *Commands* are *figured*, which produce the like *leaders*.

The front of each file, as they come to be file leaders succeſſively, with the numbers and places of the men figured according to their proper places they firſt ſtood in.

8	7	6	5	4	3	2	1
7	8	5	6	3	4	1	2
6	5	8	7	2	1	4	3
5	6	7	8	1	2	3	4
4	3	2	1	8	7	6	5
3	4	1	2	7	8	5	6
2	1	4	3	6	5	8	7
1	2	3	4	5	6	7	8

The ſeverall words of Command which produce each File leader.

2	*Ranks* } *to the right double* } *makes the Files* }
3	*File leaders and half file leaders ſtand, the reſt paſſe thereon to the right, and place your faces before your leaders,* } *makes the*
4	*Ranks* } *to the left double* } *makes the Files* }
5	*First Rank ſtand, the reſt paſſe thereon to the left, and place your faces before your leaders,* } *makes the*
6	*Ranks* } *to the right double* } *makes the Files* }
7	*Counter-march Front and Rears into the midſt, and them face to the first Front,* } *makes the*
8	*Ranks* } *to the left double* } *makes the Files* }
1	*Then face about, or Counter-march the Front into the Rear, and they are Reduced,*

The firſt are the proper *leaders* of the *files*; for to make the ſecond *leader*, if there but one *file*, then *file ranke two* to the *right*; if there be more *files*, then *ranks* to the *right double*, and *files* to the *right double*: by which meanes the ſecond man is become *leader* of his *file*, every man being diſpoſed, as you may perceive by that *file* whoſe *leader* is the *figure* of 2. to make him that was the third man

leader, let *file leaders* and *half file leaders ſtand*, and the reſt paſſe through to the *right* and place themſelves before their *leaders*; thus will the *file ſtand* like that led by the *figure* of 3. For to make him that was the fourth man *leader*, *ranks* to the *left double*, and *files* to the *left double*, whereby the *file* will ſtand like that, led by the *figure* of 4. For to make him that was the fifth man *leader*, let the *firſt rank ſtand*, the reſt paſſe through to the *right*, and place themſelves before their *leaders*, by which meanes the *file* will ſtand like that led by the *figure* of 5. For to make him that was the ſixt man *leader*, *double your ranks* to the *left*, and *files* to the *left double*, and then the *file* will ſtand like the *file* led by the *figure* of 6. For to make him that was the ſeventh man *leader* of the *file*, *counter-march front* and *rear* into the *midſt*, and *face* them to the former *front*, whereby the *file* will ſtand like that led by the *figure* of 7. For to make him that was the eight man *lead* the *file*, *ranks* to the *left double*, and *files* to the *left double*, and the *file* will ſtand like that led by the *figure* of 8. For to *reduce* them, cauſe the *firſt rank* to *ſtand*, the reſt to *advance forwards* to the *right*, placing themſelves before their *leaders*.

Reducement.

Chap. 69. *Of making men file leaders ſucceſſively, the files being but ſix deep.*

SOme will be inquiſitive to know for what uſe the *making* of *leaders* by *ſucceſſion* ſerveth, or whether it be not a meere curioſity? to which I thus anſwer; that it is not onely *pleaſant*, but *profitable*. *Pleaſant* to the *leader* of a *file*, who having ſufficiently exerciſed his *file* in *poſtures*, to give ſome time of reſpite or delectation for the recreating of their (almoſt) tired ſpirits, brings each man *ſucceſſively* to *lead* the *file* by *proper words* of *command*; and laſtly, *reduceth* each man to his former *ſtanding*. It muſt needs be profitable and much available in *diſcipline* when the *skilfull Commander* can therby (with much eaſe) *change* and *interchange*, bring what *ranks* he pleaſeth to *lead* in *front*, and *exchange* them afterwars for others; yea, and laſtly, at his owne pleaſure bring the *proper file leaders* againe into their places. This following Table ſhewes each mans ſeverall place, and how they ſtand upon every mans coming to be made *file leader*, ſtill ſuffering alteration according to their various *leaders*, demonſtrated here by the *figures* of *number* (which are placed at the bottome of thoſe Columnes, wherein are writ the *words* of *Command*) underſtand that thoſe words over the *figure* of 2. are to make the ſecond man *file leader*. Thoſe words over the *figure* of 3. make the third man *leader*. And ſo for the reſt, as in the Table,

The

The Front and ſtanding of each File as they come to be Leaders.					
6	5	4	3	2	1
5	6	5	2	1	2
4	3	1	6	4	3
3	4	6	1	3	4
2	1	2	5	6	5
1	2	3	4	5	6

The words of Command which produce each ſeverall Leader.					
1	2	3	4	5	6
	Ranks / Files } to the left double	Half files double your front to the right, and files to the right double	File leaders ſtand, the reſt paſſe thorow to the right, and place themſelves before their leaders	Ranks to the left double, and files double your depth to the left	Ranks / Files } to the right double	File leaders ſtand, the reſt paſſe thorow, and place your files before your leaders.

The firſt man is the *leader* of the *file*. For to make the ſecond man *leader*, Command *file rank two* to the *left*; if there be more *files* then one, *ranks* to the *left double*, and *files* to the *left double*, which makes the ſecond man *leader*, every man in the *file* being diſpoſed, as you may perceive by that *file* led by the *figure* of 2. For to make him that was the third man *leader*, Command *halfe files double* the *front* to the *right*, and *files* to the *right double*, by which meanes, the *file* will ſtand like that led by the *figure* of 3. For to make him that was the fourth man *leader*, *face* to the *reere* and then he *leads*; but if you will keep the ſame *front*, the firſt *rank* to *ſtand*, the reſt to paſſe through to the *left*, *placing* your ſelves before your *leaders*, thus will the *file* ſtand like that led by the *figure* of 4. For to make the fifth man *leader*, Command *ranks* to the *right double*, and *files* to *double* their *depth* to the *right intire*, by which meanes the *file* will ſtand like that led by the *figure* of 5. For to make the ſixt man *file leader*, cauſe *ranks* to the *left double*, and *files* to the *left double*, and then the *file* will ſtand like that led by the *figure* of 6.

Reducement.

For to *Reduce* them, there needs no more but *face* to the *Reer*; notwithſtanding, if you would have the *front* the ſame way; The Command is, *firſt rank ſtand, the reſt paſſe forwards to the right, placing your ſelves before your leaders.*

For to make ſix men ſucceſſively Leaders, by ſix words of Command, beſides Facings.

The firſt is *leader*: for the ſecond *file, rank two* to the *left*, and *files* to the *left double*: for the third, *counter-march front* and *reer* into the *midſt*, and *face* to that part which was the *reer*: for the fourth, *face about* to the *right*: for the fifth, *counter-march front* and *reer* into the *midſt*, and *face* to that which was the *reer*: for the ſixth, *file, rank two* to the *right*, and *files* to the *right double, face them about*, and they are *Reduced*.

Chap. 70. *Of making men file-leaders ſucceſſively, according to their precedency and and dignity in file.*

HAving already demonſtrated two *Tables*, for the making of men *file-leaders ſucceſſively*. Let it not be held impertinent if I preſent two others unto you; wherein I ſhall deliver the way of making men *file-leaders, according to dignity*. Snarling Cynicks, I know, will *carpe* at my *curioſitie*; but *ſtudious Souldiers* will praiſe my *induſtry*. Men naturally are not inclined to practiſe any thing, wherein they find not either profit or delight: few men by the *practice* of *Armes*, makes * profit. If then the *armes* of *honour* may be firſt attracted, with the various delights which are found in the ſtudy and practice of the Art *Militarie*. Why ſhould any grutch the gilt to the wholeſome Pill, (which makes it the more readily and willingly received?) Or why ſhould any hinder the meanes, whereby *Souldiers* may be built up with delight; Seeing that the benefit redounds to the Reputation and Honour of our Countrey; Thus much upon mine owne knowledge. I have ſeene ſome ſo prepoſterous, to all conceit of *Souldiery*, that they have ſhunned it with as much care, as thrifty husbands doe beggerie. Yet caſually happening, to ſee the *exerciſe* of a *ſingle file*, have been ſo taken with ſome conceipt or knack, that without any further aime, they have taken *Armes*: Wherein by their practice and induſtry, they have attained ſo much proficiency, that now they are knowne excellent in many parts of the *Art Military*. Nor hath their flowring buds been any way priviledged, or might eſcape thoſe private and froſty nips from aſperſionating tongues, a fault two common and cuſtomarie in many, to deſpiſe the virtue of thoſe whom they have knowne raw novices in that *Art* and *Faculty* wherein themſelves have beene noted any thing extraordinarie. But leſt I be cenſured to be over tart or tedious, I returne the worke of this Chapter, which is the making *men file leaders in dignity*.

* *What fortunate profits Souldiers have made by following this Art, read* Rawleighs *Hiſt. of the world, l. 5. c. 6. ſect. 2.*

Each mans *dignity* and *worth*, with the reaſons thereof, are at large ſet forth in the fourth and fifth Chapters of this Booke. The *Table* followeth, wherein is declared every mans dignity, and the words to make them *file leaders* accordingly, &c.

File

File-leaders by dignity.

The third man from the front.	The next after the halfe-file-leader.	The second man from the Reer.	The second man from the front.	The bringer up of the front halfe-file.	The halfe-file-leader.	The bringer up.	The proper file-leader.
8	7	6	5	4	3	2	1
7	3	2	6	3	7	6	5
4	2	3	1	8	6	7	8
3	6	7	2	7	2	3	4
1	8	5	4	5	1	4	3
2	4	1	3	6	5	8	7
5	1	4	8	1	8	5	6
6	5	8	7	2	4	1	2

The severall words of Command, which produce each File-leader.

0	8	7	6	5	4	3	2
The words of Command to reduce them to their former places, are placed beneath this Table.	Halfe Files double your front to the left then Files to the left double.	File-leaders, and half-file-leaders stand; the reft paſſe thorow to the right; placing your ſelves before your leaders.	Ranks to the left double; then, files double your depth to the left.	Front and Reer halfe files interchange your ground.	Bringers up double your front to the right and files to right double.	File-leaders, and half-file-leaders ſtand; the reſt paſſe thorow to the left, and place your ſelves before your leaders.	File leaders ſtand, the reſt paſſe thorow to the right, and place your ſelves before your leaders.

The Reducement.

1. Front and Reer halfe-files interchange ground.
2. Ranks to the right double.
3. Bringers up face about to the left, and march into your places.

A. 1. *File-leader.*
B. 2. *Bringer up.*
C. 3. *Half-file-leader.*
D. 4. *Bringer up of the front halfe-file.*
E. 5. *The ſecond man from the front.*
F. 6. *The next before the bringer up.*
G. 7. *Next after the halfe-file-leader.*
H. 8. *The third man from the front.*

The *file-leader* is the *A.* chiefeſt man in dignity; and firſt *leader* of the *file*. To make the *B.* ſecond man in dignity *file-leader*, (Command) *file-leaders ſtand*, the reſt paſſe through to the *right*, and place your ſelves before your *leaders*. To make the *C.* Third man in dignity *file-leader*, (Command) *file-leaders*, and *halfe-file-leaders*, *ſtand*; the reſt paſſe forwards to the *left*, and place your ſelves before your *leaders*. To make the *D.* Fourth man in dignity *file-leader*, (Command) *Bringers up* double your *front* to the *left*, and (that being done) *files* to the *left*, *double*. To make the *E.* Fift man in dignity *file-leader*, (Command) *Front* and *Rear Halfe-files* interchange ground; and then, face as before. To make the *F.* Sixt man in dignity *file-leader*, (Command) *file*, rank two to the *left*, (if it be a *ſingle file*: but if you have more *files*, then command, (*ranks to the left double*) and *files* double your depth to the *left*. To make the *G.* Seventh man in dignity *file-leader*, (Command) *file-leaders*, and *halfe-file-leaders ſtand*; the reſt paſſe forwards to the *right*, placing your ſelves before your *leaders*. To make the *H.* Eighth and laſt man in dignity *file-leader*, (Command) *halfe-files double your Front to the left*. That done, *Files* to the *left double*. This being performed, every man hath ſucceſſively been the *leader* of his owne *file*: according to his dignity therein. The *reducement* is placed at the lower end of the *Table*.

Chap. 71. *Of making men file leaders by dignity, the files being but ſix deep.*

MAny wayes there be, to make men *file leaders*, either ſucceſſively, or by dignity in one *ſingle file*; which cannot ſo eaſily (nor ſo properly) bee performed with a whole *Company* (or *larger Body*) and therefore neither *proper* nor *uſefull*. Such *wayes* onely being *fit* to bee *practiſed*, as will ſute with any number, the depth onely reſerved, which I have here undertaken for ſix deep. The following *Table* demonſtrates their number of dignity; and the ſucceſſion of each mans comming to *lead in Front*; as alſo each mans place upon the alteration of every *leader*, and ſeverall word of *Command*. Beneath each Colume is placed the words of *Command*, to produce the next *inſuing leader*. Laſt of all is the *Reducement*.

Succeſſion

Succession of leading in Dignity.

Number of dignity.						
1	2	3	4	5	6	
5	6	2	1	4	5	
4	5	1	2	3	4	
3	4	6	3	2	1	
6	1	5	4	1	3	
2	3	4	5	6	2	
1	2	3	4	5	6	

The words of Command which produce each File-leader.	
2	Bringers up double your Front to the right; files double your depth to the right.
3	File-leaders and halfe-file-leaders ſtand; the reſt paſſe through to the left, and place your ſelves before your leaders.
4	Front and Reere halfe files interchange ground.
5	Ranks to the right double; and Files to the right double.
6	File-leaders ſtand; the reſt paſſe through to the left, and place your ſelves before &c.
1	The words of Command to reduce them are beneath this *Table*.

The Reducement.

Ranks to the left } double.
Files to the left }
Halfe-files double your front to the right.
Bringers up face about to the right, and march forth into your places.

Although

Although the *Table* it selfe were sufficient to instruct the desirous; yet for the clearer demonstration, take these further instructions.

A. *The File leaders.*
B. *Bringers up.*
C. *Halfe-file-leaders.*
D. *Bringers up of the front Halfe-file.*
E. *The second men from the Front.* F. *The second ranke from the Reer.*

A. The *first Ranke*, or the *file-leaders* of each *file* are the *first* and *chiefest men in dignity*; every one in his owne *file*. To make the B. *second Ranke in dignity File-leaders*, (Command) *Bringers up double your Front to the right*; (and then) *files double your depth to the right*. To make the C. *Third Ranke in dignity File-leaders*, (Command) *File leaders, and Halfe-file-leaders, stand, the rest passe through to the left, and place your selves before your leaders*. To make the D. *Fourth Ranke in dignity File-leaders* (Command) *Front and Reere Halfe-files interchange ground*. To make the E. *Fift Rank in dignity File-leaders*, (Command) *Rankes to the right double*; and *Files to the right double*. To make the F. *Sixt and last Ranke in dignity File-leaders*, (Command) *File-leaders stand; the rest passe through to the left, and place your selves before your leaders*. The *Reducement* is placed beneath the *Table*.

CHAP.

Chap. 72. *Of drawing the Files againe into a body, and preparing them for skirmish.*

BY this time (mee thinks) I heare the *Drums beat a Call*; which *ſummons* each *file-leader* to his *place*; every man obſerving his *order*, both in *ranke* and *file*. The *Officers* having taken their due *places*: the *Captaine* and *Enſigne* in the *front of Pikes*, the *Lieutenant* in the *reer*; the *Serjeants* on the *flanks*; the *Drummes* on the *front* and *reer Angles* of the *Pikes*: as you may perceive by the *ſquare figure* following.

Upon the firſt ſummons of the Drumme, every file-leader is to draw forth his File (whether he be exerciſing them in poſture or motion) and to repaire to his rendezvouz or Colours.

Now the *Drums beat a March*, the *Enſigne* flying at the *head* of the *Pikes*; the *Pikes* and *Muskets ſhouldered*, *marching* at their *diſtance* of *order* * in *file*, at *open order* in *Ranke*; preſently by a *ſigne* from the Captaine, the *Drums beat a preparative*: the *Pikes advance*, the *Ranks cloſe forwards* to their *order*; the *Muſketiers make ready*, and every man prepares himſelfe for *Battell* or *Skirmiſh*. And here the eyes of the *Drum* muſt be very vigilant to obſerve his *Captaine* or *Commander*; that by the leaſt *ſigne*, either of his *hand*, *leading ſtaffe*, or whatſoever elſe he carries, he may either continue his *charge*, *retreat*, or elſe *charge home*: and every *Souldier* ought to be ſo well *trained* and *practiſed*, that in the time of *Battell* he may receive *ample inſtructions* from the *ſound* of the *Drumme*.

* *Diſtance in Ranke and File is to bee underſtood betweene Ranke and File; and not as ſome would fondly wreſt it.*

If the Captaine ſends out looſe Files, or Ranks to skirmish before the front, the Enſigne continues ſtanding at the head of the Pikes, his Colours flying. If the Captaine prepare to give fire, either even with the front of Pikes, or in the ſingle horne Battell: then the Enſigne to furle up his Colours, and retreat to the Half-files.

The Body drawne into a ſquare, with the Officers in their places.

Front.

C

S E S

mmmm Dppppppp Dmmmm
mmmm pppppppp mmmm
mmmm pppppppp mmmm
mmmm pppppppp mmmm
mmmm pppppppp mmmm
mmmm pppppppp mmmm
mmmm pppppppp mmmm
S mmmm Dpppppppp Dmmmm S

L

Reere.

Thus many *Officers* may ſerve for a larger *Company*, if the *Souldiers* be expert and skillfull: and to the contrary, they are all to few, if they bee raw and unexperienced. I have ſeene ſome *Companies* which have beene ſo abſolutely ignorant, that each man would have needed an *Officer* to have kept him orderly in his place. Nevertheleſſe, I make no doubt, but that by the carefull overſight of the *Lord Lieutenants*, the good aſſiſtance of their *Deputies*, and the diligence of the *Captaines*, and their *Officers*, this fault will quickly be amended. And this might eaſily enough be done, if that thoſe which are *owners* of *Armes*, would meet one hour or two in a fortnight (at their beſt leiſures) and firſt practiſe the *poſtures* of the *Pike* and *Muſket*, not omitting

Small Companies have beyond the Seas but two Serjeants and two Drums.

to *exercise* the *Motions* and *Firings*, till they are growne more *expert*. If any shall obiect, that however this may be done in *Townes* and *Cities*, yet it cannot be in the *Country Villages*. I answer, that if they meet not above some, five, or eight in a place, although they have no *Officer* to instruct them, yet by conferring and trying, and often practising, they will begin to carry their *Armes* with more ease, and to use them with more delight. Neither need they to be altogether ignorant, seeing there are divers printed *portraitures* of the *postures* of each *Armes*; as also *Bookes* whereby they may have very *ample instruction*. By which having attained some little skill, they will not be contented vntill they have better improved it by the instruction of their *Officers*: after which they will prove better *proficients* in one houre, then as they were before in a yeare.

The willing mind will find many waies to learne.

Chap. 73. *Of firing by seuerall Files, three seuerall waies.*

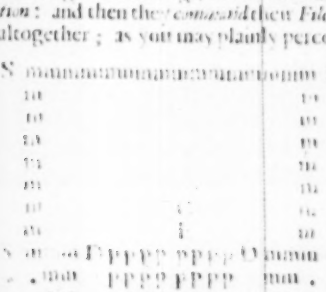
All firings either to the Front, Reere, or Flanke, whether marching, or standing, are either direct, or oblique.

BEfore I enter vpon *formes* and *figures* of *Battell*, be pleased to obserue with me, that all *firings* are either *direct* or *oblique*: notwithstanding that the *formes* are full enough of *varietie*, occasioned (most times) by the *situation* of the *place*; the *order* of the *enemy*, and the *number* of *men*: with other *Politicall obseruations* for the gaining of *Wind* and *Sunne*. For the *manner* of *Firings*, they are sometimes *aduancing* against an *enemie*, sometimes *receiuing* the *Enemies charge* vpon a *stand*, or else *retreating*. Otherwhiles, we *giue fire* in the *Reere*, *marching* from the *Enemie*: or in *Flanke*, marching by an *Enemy*: and it may so fall out, that the *Enemy* may *charge* in seuerall places at once; as in *Front* and *Reere*; or in *Front*, *Reere*, and *Flanke*; of which particulars, I will seuerally treat, desiring to giue content to all, not making the least question, but that benefit may accrue vnto some. And therefore hoping that the *courteous* and best *qualified* will accept of my good meaning, and not refuse my cares, although presented vnto them in carelesse vestes: whereby I shall be induced with more willingnesse to proceed in my intended discourses, so you be pleased to fauour me with your better *opinions*, neither rashly condemning me of *prodigality*, for enterprising a worke of such *consequence* as this, nor too suddenly acceding my *simplicity*, for preferring my *rush light* before the *Sunne*, when others suffer their *Torches* to burne out in dark Lanternes; whom I confesse to be farre more able (were they but halfe so willing) to haue imparted of their *talents* to the benefit of their *Country*. But seeing that they will not vouchsafe it; and that I, like *bold Bayard*, haue aduentured thus farre, I shall (with your good fauour) proceed. And first I will begin with *Firings in Front*, *aduancing*, and *standing*; and so to the rest. And for the more cleare expression of each *firing*, I will deliuer them both in *words* and *figures*. The *first* whereof shall be a *firing by seuerall files*, which commonly is vsed in our *exercise* two manner of waies: One way is for the two *outermost Files* of each *flanke* of *Musketiers* to *march* forth, being led on by the two *iunior Serieants*, so farre as by the superiour *Commander* shall be thought fit; who being there to *stand*, the *formost ranks* are to *giue fire*, *wheeling off* both to the *right*, or to the *right* and *left* (if it be so commanded) and to place themselues in the *reere* of their owne *files*, the rest *firing*, & doing of the like, vntil they haue *fired* once or twice ouer, according to their direct ons. Thus done, the next two *outmost files* of each *flanke* are to *march* forwards

Firing by seuerall Files

into

into the *place* assigned, and to doe the like: those *Files* which formerly *gave fire* in the meane time *trooping* backe, and placing themselves next the *Pikes*, on the *inside* of the *diuision* of *Musketeers*; the rest of the *Musketeers* (in like manner) *marching up*, and *giuing*; still placing themselves next the *Pikes*, as aforesaid. When they have *fired* all over, and placed themselves according to these *directions*, they are *reduced*, as at first. A second way of *giuing by seuerall Files* may be after this manner: The *outmost Files* of each *Flank* are led forth by the *Sergeants* (according to their *charge*) untill they have brought them into a *fit place* for *execution*: and then they *command* them *Files to ranke inward*, and to *present*, and *fire* altogether; as you may plainly perceive by the *Figure* following. *Another way of giuing.* *Note to the distinction.*

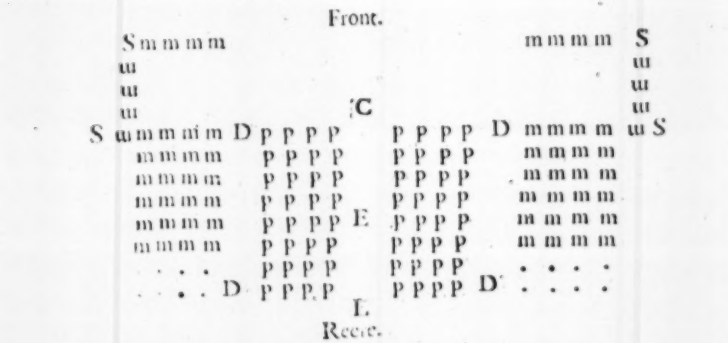


Note that the outermost file of each flank being marcht forth, the next outermost files are to follow the Reere, vntill the two first Files have ranked inwards. Then the Leaders of the second Files are to march Paste after the first File-leaders, vntil they have effected their Order.

The first two *Files* having *ranked inward, presented* and *fired*, are to *wheele off* to the *right* and *left*; following their *Leaders* in *single File*, and placing themselues on the *wings* of the *diuision* of *Musketeers*, next the *Pikes*; the next *outmost Files* which followed the first in the *reere*; in the meane time, *ranking inward, giuing*, and *wheeling off*, as before, and placing themselves next the *Pikes*. And so forwards for all the rest of the *Files*: still *marching vp*, and doing the like, so long as the *Captaine* or *Commander* shall see fitting. These kinds of *giuings* (and all such like) are either for the *beginning* of *skirmishes*, before the *Bodies* come within shot one of another, or to prouoke the *Enemy* to *battaile*, to draw them into some *Ambuscment*, and other such Politicall ends: the *number* of men which *march* forth vpon such *designes*, not the *manner*, are not alwaies certaine, but consist sometimes of more, sometimes of fewer, according to the *number*, *time*, and *place*. If the *Commander* please, *the outermost file on each flanke* may when they *moue forwards*, and are come to their ground for *giuing*, *ranke the one halfe of each File inward into the front*: *the rest being led by their halfe File-leaders, moue forwards to their Order, flanking File-wise after the outermost men (of the former ranke) who are the File leaders*; *having fired, they are to wheele off*; *the others in the interim, ranking into their places, the next outmost Files, to march forwards*; doing according to the former directions for the whole *Files*. *The Files being ranked inwards the File-leaders become the outermost men of the ranke (when they giue Fire) and become leaders of their Files againe in the wheeling off after they haue fired,*

Chap. 74. *Of Firings by two Rankes, ten Paces advanced before the Front: Next, even with the Front: And laſtly, even with the half-pikes.*

A *Dvancing* of two *rankes* to *fire*, *ten paces* before the *Front*, is moſt commonly uſed, when one or both *Battels* march againſt each other; the *Muſkettiers* being *led* forth by two ranks together ten or twenty *paces*, before the *front* of the *body*; that ſo they may come neere enough to doe certaine *execution*. A *Serjeant* from each *flanke*, *leading* up to the two *formoſt rankes*, (according as they ſhall have order) the firſt *ranke* of each *flanke* is to *preſent* and *give fire*, *wheeling* either all *off* to the *right*, or to the *right* and *left*, as you may perceive by the following Figure.



The manner deſcribed how this firing ought to be performed.

The firſt *ranke* having *preſented*, *fired*, and *wheeled off* (as aforeſaid) are to *march* cloſe downe in *ſingle File*, within *three foot* of their owne *flankes*, untill they come to the *Reere* of their owne *Diviſions*; where every man is to place himſelfe in the *reere* of his owne *File*. The ſecond *ranke* being at the *diſtance* of *three foot* behind the *firſt ranke*; when they firſt tooke their *ground*: they likewiſe are to reſt their *Muskets*, mounting their *muzles* cleare of their *leaders*; and ſo to *ſtand* with their *matches cocke*, and *pannes guarded*, that ſo may *levell* and *Fire* as ſoone as their *leaders are cleare* of them, and *wheele off*, in like manner *placing* themſelves as they were before. The next two *ranks* are to begin to *advance forwards*, when they ſee the *laſt* of the *two former rankes*, *preſented*, *ready to fire*. And they alſo having *fired*, *wheel off* as the others did before them. And ſo, *ſucceſſively* the reſt of the *ranks advancing*, *firing* and *wheeling off againe*, *placing themſelves* according to former *directions*. This *way* they may give *fire*, *once* or *oftner* over, as the *enemy* doth *advance*, or the *Commander* ſhall ſee fitting. All this while that the *Muſkettiers advance* ſo farre before the *Front*, (if the *body* be upon *march*) the *Pikes* may be *ſhouldered*: but when the *Bodyes* come within *ten ſcore*, or leſſe, (*if there be any doubt of the enemies horſe*) then it is fit that the *Muſkettiers* give *fire* even with the *Front* of the *Pikes*, and that the *Pikemen advance* their *Pikes*, and *cloſe forwards* to their *diſtance* of *three foot*, that ſo they may

No Commander ſo preciſely bound to any forme, but that he may, as occaſion ſerveth, alter his Figure at his pleaſure.

be

be *even* in *rank* with their *Muſkettiers*, as you may perceive by the following *Figure*. If there be no feare of the *Enemies Horſe*, then the *Pikes* may move *ſhouldred, and cloſe forward to their Order*; by that meanes ſaving their *pikes* from being ſhattered and broaken by the *bullets* that flye at *random*.

Front.

C

S m m m m D p p p p p p p p D m m m m S
m m m m m p p p p p p p p m m m m m
m m m m m p p p p p p p p m m m m m
m m m m m p p p p E p p p p m m m m m
m m m m m p p p p p p p p m m m m m
m m m m m p p p p p p p p m m m m m
m m m m m p p p p p p p p
S . . . . D p p p p p p p p D . . . . S

L

Reere.

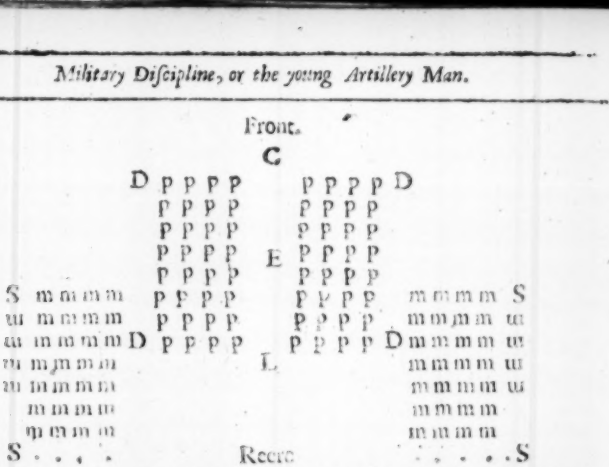
Now the *Pikes* being *advanced*, the *rankes cloſed forwards* to their due *diſtance* of *order*, the *Muſkettiers* are to *preſent*, *even* with the *Front*, every *rank* ſucceſſively moving forwards, untill they come to be *even* in *ranke* with the firſt *ranke* of *Pikes*, there to *give fire*, and to *wheele off* to the *right and left*, *trooping*, *file wiſe*, downe cloſe to their own diviſions: and taking their places in the *Reere*, as in the former figures. The firſt *ranke of Muſkettiers* having fired, and *wheeled* away, the next *Rankes* are to move fowards at three **Motions*, into their places, and there to *give fire* after the ſame manner; *wheeling* away againe, and placing themſelves according to former directions, every *ranke* ſtill making good their *Leaders ground*. In this ſort the *Battell* may be continued, untill they have fired once, twice, or oftner; and that the *Bodies* be come ſo cloſe together, that the *pikes* begin to *port*, and ſo at length come to *puſh of pike*. Which done, the *Muſkettiers* are to give fire, either *retreating*, or elſe not to *advance* further, then the *halfe files of pikes*. For in that place (the *bodies* being come ſo nere together) they will doe as much execution, as if they were even with the *Front*.

*The three motions are, *Blow your coale*. *Open your Pan*. *Preſent breſt high*. You are to

The manner of the ſtanding, you may perceive by the following *Figure*.

blow your coale, ſtepping forwards with your left foot. *Open your Pan*, ſtepping forwards with your right foot. *Preſent*, ſtepping forwards with your left foot. Theſe *Motions* are to be performed hand and foot together, by every one that *advanceth ground*, to *give fire*, without expecting any directions in time of *ſkirmish*.

The Pikes comming to the port and charge: the Muſkettiers either firing without advancing into their leaders ground or even with the halfe files.



The *Pikes* being now *charged*, and ready to come to the *puſh*, the *Muſkettiers* are to advance no further then the *halfe files of pikes*: that ſo they may doe Execution with their ſhot, and be out of danger of the *Pikes*. This having attained, they are there to *preſent*, and *give fire*; every ranke ſtill moving forwards and maintaining his Leaders *ground*. After they have performed their firing, they are to wheele off by *Diviſion*, as in the former Figures: ſtill placing themſelves in the *Reere* of their own files, alwayes taking their directions from the *Drum* either for *charging* on, or *retreiting*, &c.

Reducement.

The *Battell* or charge being ended, the *Reducement* is eaſie, The *leader* of each File being in his place at the *head* of his *file*, command the *Muſkettiers* to *march* up, even with the Front of *pikes*, and then they will be as at firſt.

Note the ſeverall obſervations.

Obſerve withall that when the *firing* is to be performed, *even* with the *front*, then the *Muſkettiers* are ſtill to make good their *Leaders ground*: the want to be in the place of moſt ſecurity (which is the *Reere*) as you may perceive by the *pikes*, which I have deſigned, for noting out the *empty roomes* of ſuch who have *cloſed forwards* to make good the ground in the *Front*: the others that laſt *fired*, are wheeled off, and *trooping downe* into their places. When the firing is even with the *halfe-files*, they are to do the like, unleſſe the *Drum beat a retreit*: For then the *Muſkettiers* neither *advance*, nor *reitreit*; but every *ranke giving fire* on the ſame ground they ſtand: and then wheele off againe, that their *fellowes* may do as much. * Neverthleſſe when the *forlorne files march forth*, or that *two rankes march forth ten paces* (*or more*) before *the front*, *then* they are to *give Fire*, as upon a *retreit*: unleſſe *the enemy* give ground or flye. I will now ſhew ſome other wayes of firing in *front* (before I ſhew the firings in the *reere*) The firſt whereof, ſhall be *the Horne Battell*: as in the Chapter following,

** Note concerning forlorne files, and two ranks before the Front.*

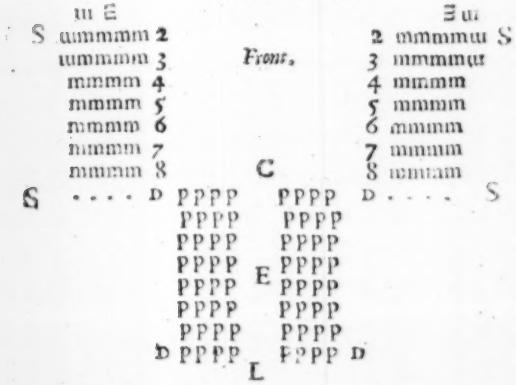
Chap. 75. *Of the Horne Battell, how to make it, and to reduce by firing.*

The *Horne Battell* may be for the ſame occaſion and uſe, as *the firing* by *two Rankes ten paces advancing* before *the Front*; and is by ſome held more ſerviceable, becauſe that the *Muſkettiers* doe their *execution* more roundly with out any intermiſſion of time: and keep *themſelves* without ſtragling from their

their *Bodyes*. Beſides *the wings of Muſketteirs*, being ſo advanced, are more apt for *over-fronting*, and more eaſily to be wheeled, whereby to charge the Enemy in *Flanke*, each of theſe *wings* or *diviſions* are to be led up by a *Serjeant* (or ſome ſuperiour Officer) unto the place appoynted by the *Chiefe*. But becauſe it may be performed in time of *exerciſe*, by the intelligible *Souldier*, obſerve the *Command* which produceth this following Figure.

Pikes ſtand; Muſkettiers, march; untill the Bringers up, ranke with the front of Pikes.

The Horne Battell.



The *Figure* being perfect, the *firſt Ranke of Muſkettiers, preſent and give Fire, wheeling off*, either all to the *right*, or to the *right* and *left* (according as they ſhall have direction) and placing themſelves orderly, in the *Reere* of their owne *Files*. The *next Ranke* (after the ſame manner) *Firing* and *wheeling off*, and placing themſelves *behinde* thoſe, which were their Leaders. Thus is every *Ranke*, ſucceſſively, to doe the like: untill they have all given fire. If the *Commander* would ſtill preſerve, and continue the ſame *Figure*; then let the *Muſkettiers* ſtill *move forwards*, into the ground (or place) of them that *Fired* before them: and the *forme* will be the ſame. But if by the *Captaine* it be found neceſſary, that after once or twice *firing* over, the *Shot* ſhould *flank* their *Pikes*, then the *Muſkettiers* muſt not *advance* into their *leaders ground*; but to the contrary, every ranke is to *preſent* and *Fire* on the ſame *ground*, they ſtand, and that ſo ſoone as they are *cleere* of their *Leaders*. Or if need be, the *Pikes* may advance and *march* up, to make their *Front intire*: which being done, the *File-leaders of Muſkettiers* being in *front*, they are *Reduced*.

The firing deſcribed.

Note.

Reducement.

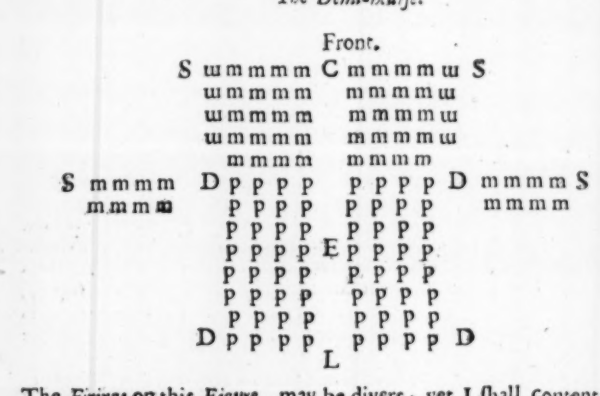
Chap. 76. *Of the Demie-hearſe Battell: The uſe of the Figure, how to make it, and to reduce it by Firing.*

THe next fitting in *Front* which I preſent unto you, is the *Demie-hearſe*: which is a *Figure*, firme, ſolid, and ſtable, yea and doth as much *execution* as any of the former, and that with halfe the danger. For the *Pikes* in the former Figure, the either *rank even* with the Front of the Muskets, or elſe the *diviſion* of *Muskettiers* being *open*, they become liable to the danger of the enemies ſhot: themſelves not being able to doe any thing, either *offenſive* or *defenſive*. But, to the contrary, in this *Figure*, they are ſecurely covered by their owne *Muskettiers*: untill thy approach neerer to the enemy. Whereby they may be able to doe ſome ſervice; either by ſending their *ſhowres* of *Arrowes* amonſt them, thereby breaking their order and array, or elſe by *cloſing neerer*, come to the *ſhot*, and ſo try the fortune of the day. But not to hold you longer in *circumſtance*, take the words of *command*: which produce the *Figure*, as followeth.

The danger of the Demi-hearſe, is feare of being over-fronted.

Pikes ſtand, Muskettiers advance before your Front of Pikes, and cloſe your Diviſions.

The Demi-hearſe.



The *Firings* on this *Figure*, may be divers; yet I ſhall content my ſelfe onely to ſhew two of them.

* *The firing on this Figure.*

* The *firſt* is, that the Muskettiers may at the diſcretion of the *Commander*, *give* fire in *front*: and ſo *wheele off* by *diviſion* (or all to the *right*, as ſhall beſt pleaſe him that *commands* in *chiefe*) placing themſelves in the *Reere* of their owne *Diviſions* and files of *ſhot*, which is juſt before the *front* of Pikes. The *next ranks*, then *moving forwards* into their *leaders ground*, are to *preſent*, *fire*, *wheele off*, and place themſelves after the ſame manner: the *reſt* of the Muſkettiers, doing the like, untill they have all *given fire*: which *firing*, doth nothing

thing alter the *forme or Figure* of *battell*. Having *Fired* once or twice over this way, the ſecond *Firing* ſhall ſerve for *reducement*: which is indeed the *Firing* intended to be expreſt by this *Figure*. And that I may by *words* the more clearly explaine the Worke, take theſe *directions* following.

The ſecond firing on this figure ſerveth for the Reducement.

* The *firſt ranke* having *given Fire*, are to *wheele* equally *off* by *diviſion*: each part falling *File-wiſe downe*, cloſe by their *Flanks* of Muskettiers: untill the *leaders* of the *ranks* of Muskets come downe as low as the *firſt rank* of Pikes; which being performed, they are to *face outwards*, and to move ſo farforth in a *ſtraight line*, untill they have *ranked even* with the *firſt ranke* of Pikes. But herewithall are they to obſerve, that they muſt leave an *interval* betweene the *innermoſt Musket* of each *flank*; and the *outermoſt file-leader* of the Pikes. So ſoon as the *firſt rank* hath *given fire* and *wheeled away*, the *ſecond rank* is to *give fire*, *wheeling off*, as before, and *paſſing down* between the *Intervals* on the *flanks*: placing themſelves after their *leaders*. The ſame is every *ranke* ſucceſſively to doe, untill all the Muskettiers are *drawne* from before the *front*, and placed on the *flanks* of their Pikes. But when there are not above *two ranks* of Muskettiers to *give fire*, then the Pikes may *Port*; and when the Muskettiers have *fired*, and are *wheeled away*, they may *charge*. And laſtly, the Pikes being *re-advanced*, the *body ſtands reduced*, as at firſt.

* *Note this direction.*

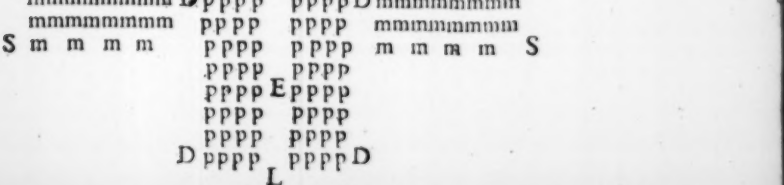
The Pikes Port and Charge.

Chap. 77. *Of giving fire, advancing, by way of Introduction, with the beneficiall uſe of the Bow and Pike.*

I Shall next offer to your peruſall a *Figure* of *Introduction*: which is a *paſſing through* or *between*: Being a *firing*, *advancing* againſt the *enemy*, and *gaining ground*. I will not diſpute how uſefull it is; but ſure I am, it is over-ballanced with danger. As for ſuch whom I have ſeen to *practice* it, they have rather uſed it for *variety* in a well experienced *Company*, then for any known *excellency* it hath in it ſelfe. But if theſe *lines* happen to be over-lookt by any, that preſerves a better opinion of this *firing* by *introduction*, then I doe: I ſhall be willing to leave them to their owne liking, while I in the meane time proceed to ſhew the manner of the *execution*, which is uſually one of theſe two waves. The firſt, when the *Motion is begun by the ſecond Rank from the front*. The other, when it *is begun by the bringers up*. Nevertheleſſe, you muſt note, that your *files* of Muskettiers muſt be *opened* to their *open order*; before the *firing* begin: that ſo, the Muskettiers may paſſe between the *Intervals* of each *file*, to *give fire* in the *front*. And therefore take the words of Command and Direction; which willl produce this Figure following.

Firing by introduction ordinarily performed, theſe two manner of wayes.

Muskettiers, make ready to give fire by introduction.
Files of Muskettiers, open by diviſion to your open Order.



This direction for firing by introduction.

This *firing* by introduction may be thus performed. The Pikes being flankt with their Muſkettiers, the firſt ranke of each flanke, *preſent* and *give fire*: having *fired*, they *ſtand* and *make ready* againe in the ſame place. The ſecond ranke paſſing forwards before the firſt, doe there *fire* and *ſtand*: the third ranke then paſſing forwards after the ſecond, and ſtanding even in ranke with them that firſt *fired*; that ſo ſoone as the ſecond ranke hath *fired*, they may quickly ſtep before them, and *fire* in like manner. In this *firing*, ſtill the ranke which is next to *fire*, ſtands even in ranke with them which laſt *fired*; untill thoſe which *ſtand preſented*, have likewiſe *given fire*: after which they then paſſe before them; the Ranke which their next followers, paſſing forwards and ranking with thoſe which laſt *fired*: every man following his Leader ſucceſſively, untill the *Bringers up* give *fire*, and *ſtand*, and then the Figure will become a *Horne Battell*. All the while that this Firing by *Introduction*, is continued, the *Pikes* may be * ſhouldred (if there be no feare of *Horſe*) or otherwiſe at diſcretion. If you continue this Firing twice over; the Muſkettiers will have their *right places*: which being done, *march* up your Pikes, to ranke even with your Muſkettiers in *front*, and they are *reduced*. * For the other way of Firing by *Introduction*, the firſt ranke or *file-leaders*) are to *give* fire as before, and to ſtand, the laſt ranke (or *bringers up*) in the interim of their firing; marching *up*, and *ranking even* with the ſecond ranke: the reſt following their Bringers up, as they doe when Bringers up double their *front*. The firſt ranke having fired, the *bringers up* ſtep immediately before them; *preſent*, and *give fire*; the reſt ſtill ſucceſſively doing the like, untill every rank have given fire once o er. Obſerve withall, that the *file-leaders* are to give fire twice over: being the firſt and the laſt, : and then to *ſtand*, the *Pikes* marching *up*, even with their fron: of Muſkettiers. And thus they are reduced as at firſt. The Pikemen, all the time of this *firing* doe no ſervice: Notwithſtanding, if one *halfe* of them had *Bowes* faſtened unto their Pikes (being able and well practiſed men) they might, whileſt the Muſkettiers are in *firing*, be dealing of their doles about: and although their *Arrowes* did not happen to wound mortally, yet the whiſteling noyſe, the terrour of the ſight, and the ſeverall hurts (which could not chuſe but be many) would be a great abatement to the ſtouteſt courages. And great pity it is to ſee the luſty *Pikeman* poorely to drop downe by the *Muſket ſhot*, himſelfe not being able to hurt his enemy at that diſtance, nor defend himſelfe.

* *The Pikes may bee ſhouldered, and ſtill be moving ſlowly forwards, and ſo keep even with the Front of Muſkettiers.*

* *A ſecond way of firing by introduction. Reducement.*

The uſe of the Bow and Pike.

Chap. 78. *The way to make the Diamond Battell: ſeverall waies to Fire upon it: with divers other Figures and Firings, which are thereby produced.*

THe *Diamond Battell* is alſo a firing in *Front*; though more for ſhew, then *moderne ſervice*; yet becauſe that ſome hold it in venerable reſpect, I thought fit to place it amongſt the reſt; leaving e very man to his liking, either to uſe it, or refuſe it. It may be that ſome will looke, that I ſhould make the *Sheare Battell*, the *Wedge*, the *Saw*, and many ſuch like: which might be made either *hollow* or *ſollid*. But I ſhall intreat ſuch to ſpare me, for I would not willingly ſpend time to ſo ſmall purpoſe; chuſing rather to inſiſt on Figures, more profitable for them, and commendable for mee. Yet if any man have

have a minde to practice any of them, by obſervation of this *Diamond Battell*, he may eaſily make them But not to hold you longer with circumſtance, the words of *Command* and *Direction*, which are for the making of this *Diamond Battell*, are as followeth.

Firſt, cauſe your Muſkettiers of the right flanke, to open to the right, to a ſuffi.ient diſtance for receiving the Muſkets of the left flanke.

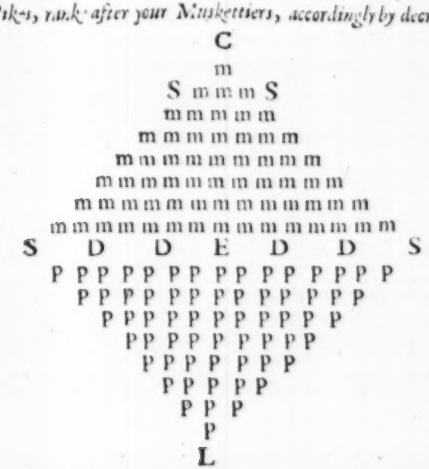
Then Command the Muſkettiers of the left flanke to paſſe through, into a ſpace of ground on the right

Or you may cauſe your Pikes to ſtand, and Muſkettiers to move all into the Front, then joyne them before the Pikes, which is the better way. But whether your Muſkettiers be all in Front, or on the Flanke.

The Command is,

Files of Muſkettiers, ranke 1. 3. 5. 7. *&c. by increaſe to the left.*

Files of Pikes, ranke after your Muſkettiers, accordingly by decreaſe.

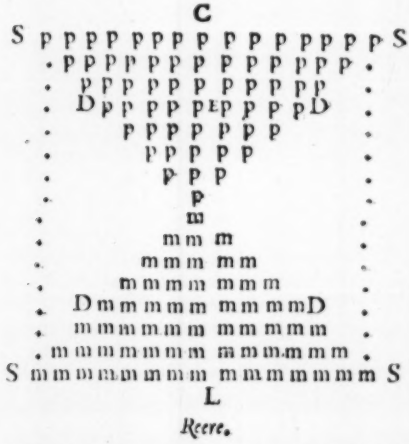


The Muſkettiers may *fire* on this Figure, divers waies: though I onely intend to ſpeake unto two of them. The firſt is the moſt uſuall way: and that is, the *giving fire in Ranke*; the foremoſt man (or *poynt* of the *Diamond*) firſt giving *fire*: then wheeling off to the *right*, and placing himſelfe juſt behind the *ſingle Pikeman* in the *Rere*. Then the *next ranke* being three men, *give fire*, *wheeling off* by *diviſion*: and placing themſelves in Ranke, behinde the *ſingle Muſkettier*, as they were before the *firing* began. This done, the ranke of five *Muſkettiers*, *gives fire*; *wheeling off*, in like manner, by *diviſion*: ever obſerving that where the *number* is *odde* and they *commanded* to *wheele off* by *diviſion*, there the greateſt *number* alwaies goeth to the right. And ſo in like manner, the Ranks *give fire* ſucceſſively; and place themſelves after their *leaders*, as before. When all the *Muſkettiers* have *given fire*, and are *wheeled off*, then *charge Pikes*, which

The way to fire on the Diamond Battell.

which will be fifteen in the *firſt Ranke*, the reſt *decreaſing*. Having advanced your *Pikes*, your Figure will ſtand like two *wedges*, with their poynts joyned, as you may perceive by this Figure next following.

Front.



Reere.

Obſerve this way of reducement, by interchanging of Ground.

If you would reduce your men from this *figure* without *firing*, your men being ſufficiently expert) let the *Muſkettiers ſtand*, and *Pikes* face to the *Reere*, and ſo the *wedges* will ſtand faced in *oppoſition*: next, command them to *interchange ground*. the *Muſkettiers* advancing forwards, into the *ground* of the *Pikes*, and the *Pikes* moving into the *ground* of the *Muſkettiers*; then by facing the Pikes to the *former front*, the *Body* will ſtand in forme of a *Diamond* againe.

** An oblique firing from the Diamond, the Muſkettiers, countermarching & making a deepe wedge.*

If you would *reduce* this Figure againe into the forme of the Diamond, by firing your *Muſkettiers* being now all in the *reere*) the *body* muſt *face about*: and ſo the *firing* will be contrary to the former. But if you *wheele them about*, they may *give fire* the ſame way. Howſoever after they have *given fire*, they are to *wheele off* by *diviſion*, and to place themſelves in the *reere* of the Pikes, *even* in ranke againe, as they were when at firſt they *gave fire*. Thus having all *fired* over, and *wheeled away*, the *Pikes* may charge: and being againe *adv anced*, the *body* will ſtand in forme of a *Diamond*: and this I pray you to conceive, for I intend not to remake the Figure.

** The direction for this firing.*

* The *ſecond* way of *firing* on the *Diamond Figure*, is by way of *Countermarch*: and is an *oblique firing*. For whereas in the other *firing* by *rankes* (in the *Diamond Battell*) each *ranke fired* by *increaſe* of two (*beginning* with one, and *ending* with fifteene in a *ranke*) this *firing*, contrarywiſe, *begins* with fifteene, and *ends* with one, ſtill *decreaſing* two. * For this *firing*, your *files* muſt be at *open order*, becauſe the *Muſkettier* muſt *countermarch* downe between the *Intervals* of their owne *files* to the *right*: every Muſkettier that finds himſelfe without a *leader*, being

being to *preſent* and *give fire*: and then to *countermarch* to the *right*, placing himſelfe in the *Reere* of his owne *file*, behind the Pikes. When the firſt fifteen have *fired*, then the *next* thirteen *preſent*, *fire*, and *countermarch*, ſtill placing themſelves in the *Reere* of their owne *files*. Next there fireth eleven, then nine, &c. for ſtill there fires ſo many, as are *cleere* from any *leaders*. And in this manner of *firing*, they that *fire together*, ſtand neither in *ranke* nor *file*, but *obliquely*. When all the Muskettiers have *fired*, and are *countermarcht* into the *Reere* of their owne *files*, let the *Pikes charge*: and then the *forme* of your *Battell* will be like a *deepe wedge*: as you may perceive by the following *Figure*, where now your *Ranks* are become *two* and *two of a number*.

* Your men ſtanding in this forme of a *deepe wedge*, if you pleaſe yet to be more curious, face them all to the *Reere*, and command your Muskettiers to march ten or twelve paces. Your *Pikes* to ſtand, which done your *Muskettiers* will preſent you with an *hollow wedge*, and your *Pikes* with a ſollid *wedge*. ‡ Laſtly, to *reduce* all theſe ſeverall formes into the *firſt proper* ſquare battell: firſt, let the ſollid wedge, *cloſe forward*, into the hollow of the other: then, let the *Muskettiers* make *ready*, *preſent*, and *fire*, as before. That is to ſay, every *Muskettier* that finds himſelfe without a leader, is to give fire, and to *countermarch* to the Reere of his owne file, the reſt doing the like, ſucceſſively. When they have all fired, and are *countermarcht* cleer, let the *Pikes* charge: and then

* *Curioſitie ſometimes not to be neglected becauſe ſome men being therwith delighted, may therebe gained to effect the practice of Armes, and after ſome continuance therein, may happily prove, ſolid, and good Souldiers.* ‡ *Reducement.*

This facing to the reere, makes the Musketiers to be againe in the Van.

your *body* will have the *form* of a *Diamond* againe. Next, face them all to the *Reer*, and *command ranks, file* 8. to the right. Which being done, paſſe through the *Muskettiers* which belong to the *left-flank*, into their places; and cloſe the *Muskettiers* of the *right-flank* to their due diſtance: this done, they will ſtand, all properly *reduced*, into the Square, as at firſt.

Ch p. 79. *Of the Convex halfe-Moon; The uſe of the Figure: and of ſeverall wayes of firing upon it.*

THe *Convex* halfe-Moon, or *Semi-circular Battell*, is a form in it ſelfe, both good and uſefull; which the time, the number, and place (with o her circumſtance) may make either beneficiall, or prejudiciall: wiſe Captains and Commanders e erfore ſeeing with pro idence, what forms or *figures* may be moſt *profitable* and availeable, for the preſent ſervice. This Convex *figure* may be uſefull, either at the *landing* of *Souldiers* in an enemies *Countrey*, or for neceſſity (the enemy being more able in *horſe* making uſe of either *hedge*, *ditch*, *wood*, *creeke*, or *River*; to ſecure the *Reere*. For the figure it ſelfe, it may be made many wayes, either with the Muskettiers outermoſt, or innermoſt, or lined &c. at the diſcretion of the Commander. It may alſo be made in a *Regimentall* way, or after the way of a ſmall and private Company; But becauſe I ha e onely in this my ſmall *Treatiſe*, taken upon me to ſhew the *poſtures motions*, and *figures*, which are moſt uſually done in a ſmall *Company* (although many of them, yea the more part, may be very fit for larger *Bodies*) I ſhall content my ſelfe, to *ſaile* in ſo ſmall a *bottome*, not deſiring to put on more *ſaile* then will ſuffice, for the *bearing* of ſo ſmall a *burthen*. Wherefore my requeſt ſhall be, that e ery *courteous*, and *skilfull Pilot*, that ſhall *come aboard* this ſmall *Barke*; will be pleaſed neither to *launch* it into the *maine*, leſt it be *ſwallowed* in the *Surges*; nor to *expoſe* it to the danger of *ſhelves*, *rocks*, and *ſands*, leſt it ſuffer *ſhipwrack* for want of good *guidance*, but ſo to *ſteere* it, that it may ſafely arrive at it's deſired *Harbour*: wherein they will both honour themſel es, in expreſſing their vertues, and gratifie me, by applying each motion, figure, and forme, to his right uſe, and true in ention. I will now ſhew, how the *figure* is to be made, which is as followeth. If your *Battell* be in *forme* of an *Hearſe*, then wheele them to the right or left abour; untill they ha e attained this *Figure*. But if in a ſquare, then obſerve theſe following *words*, which will produce the *Figure*.

The uſe of this Figure.

The direction to make this Figure.

Wheel your Flanks into the Front; then face the Body to one of the Flanks: and wheel your Battell into a Convex half Moon.

If your *Body be large*, then inſtead of *wheeling the Flanks into the Front*: cauſe your Muskettiers to *move forwards*, and place themſel es *before their Pikes*. Then Command fi e or ſixe of the *outmoſt Files on each flanke* (both Muskettiers and Pikes) *to wheel*, thoſe on the *left flank to the left*, thoſe on the *right flank to the right*: the reſt of the *Body* in the meane time mo ing forwards to a convenient diſtan e, and five, ſixe, or more of the outermoſt Files to ſtand, and then to *wheel to each hand*, as aforeſaid, the reſt doing the like ſucceſſive ally, untill you ha e *formed* your *Figure*.

The Convex half Moon.

See the Figure folded in here.

Having

Having brought your *Soldiers* into this *Convex form*, you may face them all *inward*, for *ſpeech*, or *outward* for *Fight*. Then let the *Officers* make *Intervals* for the *Muskettiers*, and let the *uttermoſt Arch* or firſt rank of each diviſion, preſent and give fire, thoſe of the right flank wheeling off to the right, the left flank to the left; placing themſelves in the Reere of their owne diviſions of *Muskettiers*, ſtill making good their leaders ground. The reſt of the rankes are to doe the ſame: untill they have all given fire. Nevertheleſſe, if your enemy be too potent for you, by reaſon of his *Horſe*, your *Bow-Pikemen* need not ſtand idle, although they ſtand behind their *Muskettiers*: for that they may ply them faſter with their ſhafts, then the others can with their ſhot; But if the *Horſe* be ſo violent, that the *Muskettiers* may not abide them, then let them give Fire, and wheel off by diviſion, as before; paſsing quite through their *Interval's*, and placing themſelves in the Reere of their Pikes, every ranke making good their Leaders ground. Thus alſo are the reſt of the *Muskettiers* to give fire, placing themſelves in the concave part of the body, as aforeſaid, following in the reer of the Pikes, which now make good the *Muskettiers* ground. If need be the Pikes may charge over hand, or if occaſion ſerves at the foot, drawing forth their ſwords over their left armes, and couching down their heads: by which meanes the *Muskettiers* may give fire over their ſhoulders. For the firſt rank having Fired, may kneel down on the ground, and charge againe, the ſecond rank may give Fire, and kneel in like manner, making ready againe. And ſo for the reſt, all giving Fire, and kneeling on the ground, that ſo the next rank behind may give fire over them. Thus continuing the Firing, untill all the *Muskettiers* have given Fire, once over. Nevertheleſſe, if the enemy ſhall ſtill continue his charge, and preſſe upon you, the firſt rank may riſe with the reſt, and give Fire over againe, as before. And ſo the battell may be continued; the Pikes ſtill keeping off the Horſe.

The ſeverall wayes to fight upon this Convex figure. The Bow and Pike very good and uſefull againſt the horſe, in this figure of Battell. A good way in time of neceſsity, to beat off the inſolence of the horſe. Another way to give fire by extraduction, as in the next Chap. Reducement.

For the *reducement* of this figure, and to bring every man to his place, let your *Muskettiers* (either firing, or *paſsing through*) be brought into the *places* they were in, before they firſt gave fire. Then *face* the whole Body to one of the flankes, and march them untill they have evened their rankes, and ſtraitned their files. This done, if all your Pikes be on the right flanke, wheel your right flanke into the midſt, if on the left flanke, wheel front, and reere into the left flanke. This being done, let the *Commander* paſſe to his proper file-leaders, and face the whole Body to him, and they are reduced as at firſt. If you did not *wheel your flanks into the front*; But your Body being large enough, *you drew your Muskettiers before your Pikes*: Then having ranged your Body even a breaſt: *Command your Muskettiers to open to the right and left, untill they are cleare of the Pikes, then face to the firſt front, and march up even a breaſt with the Pikes*, and they are *Reduced* as at the firſt.

Chap. 80. *Of Extraduction: the ſeverall uſes, firings, and reducement.*

THe next *Firing* which I ſhall take upon me to demonſtrate, ſhall be by way of *Extraduction*: which is alſo a firing in front. It may be to ſingular good uſe, in a *ſtraight*, or *paſſage* where your *Wings* and *Reere* may be *ſecured*: your enemy being ſuppoſed too powerfull for you, either in *Horſe* or *Foot*, or both. Having gotten into ſome *ſtrait*, there fill the *mouth* of the *paſ-*

The uſe of this firing by extraduction.

ſage

ſage with your Pikes: and if the length of your *Company* be not ſufficient to doe it, then double your *ranks* (as in this following figure) and let your *Pikes* either *order*, *advance*, *port*, or *charge*: according to the occaſion; your *Musketiers* being in the *Reer*, may *march up* into the *Front*, and *fire*. But before I ſhew the *firing*, obſerve theſe following *directions*, which produce the *Figure*.

The Muſkettiers ſteeve up file-wiſe, to the front, and there give fire in ranke, croſſe the front of the Pikemen.

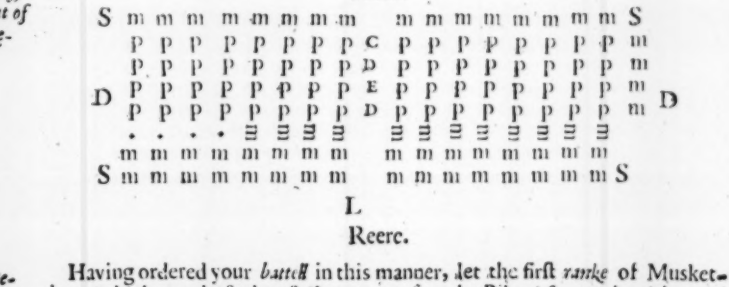
Pikes ſtand, Muskettiers face to the Reere, and march, untill you are cleare of your body of Pikes.

Then face inward, and cloſe your diviſion: that thing done, face to your Leader, and double your Ranks.

This being performed, the Pikes are all in *Front*, the Muskettiers in *Reer*.

A firing by Extraduction.

Front.



L

Reere.

The direction for this firing.

Having ordered your *battell* in this manner, let the firſt *ranke* of Musketiers (which are thoſe that follow next after the Pikes) *face* to the *right*, and march forth (file-wiſe) up cloſe by the right *ſanke* of Pikes, untill he that is the *leader* of them become into the Front of Pikes, then he is to *lead* them quite croſſe the front of Pikes, untill he have attained the further part of the *front* to the *left*; whih being done, they are all to *ſtand*, *preſent*, and *give fire*. You muſt note withall, in this Firing, that he which was the *right hand man* of the Ranke, and was the *Leader* of the *motion*, now becomes *the left hand man*, when he gives fire; and that having *fired*, they are to wheele off to the left, cloſe to the left ſlanke of Pikes, and ſo to fall in the reere of the Muskettiers. In the *interim*, whileſt that the ranke which firſt fired, is wheeling away, the ſecond ranke is *marching* into their *places* to give fire. And in this manner they may maintain their *Battaile*, ſo long as they pleaſe: * the Pikes either *porting* or *charging* all the whiles. The Muskettiers in the time of their *croſſing the front*, are to couch, or ſtoope under their Pikes; that ſo they may be no impediment to the Pikes in their *charge*. There is another way of *firing by Extraduction*, which is, that the right hand leader of *Muskettiers*, *placeth himſelfe before the right* file-leader of *Pikes*: the reſt all falling beyond him, nevertheleſſe becauſe I conceive it not to be ſo good a way as that already ſhewne, I will not trouble you with it: ‡ but come immediately to the *reducement* of this, which is as followeth. Command your Pikes to ſtand, and your Muskets to *double* their

** If the Pikes charge, the Muskettiers muſt give fire kneeling on the ground. Another way of placing the Muskettiers on this firing.*

‡ The reducement.

their *front* by *diviſion*: but if you want roome to doe it, then firſt *double* your *Files* to the *contrary hand* of that, which you *doubled* your *Ranks*; and ſo having *doubled* by *diviſion*, as aforeſaid, they will be *reduced*, as at firſt.

Chap. 81. *Of the Broad or long fronted Battell, with the wayes of firing upon it.*

THe *broad or long fronted Battell*, muſt needs be of ſpeciall uſe; for many occaſions, either *offenſive*, or *defenſive*. Which becauſe it is ſo apparant to all, I ſhall not need to ſtand to reaſon with any; rather deſiring to ſhew the manner of *making* and *reducing* it: which is as followeth. Cauſe your Pikes to *ſtand*, and your Muskettiers to *march*, untill the *Reer rank* of Muskettiers be *advanced* a little before the firſt *Rank* of Pikes; then let the Muskettiers *face inward*, (or in *oppoſition*) and *cloſe* their *diviſions*; and then *face* to their *Leader*. As if you would bring more *hands* to *fight* *double ranks* to any *hand*, and the *body* (for *forme* and *number*) will ſtand like the *figure* here next following. But the *ſpedieſt way*, (and I thinke the beſt, I am ſure with *expert Souldiers*) is to *wheele* both *flanks* into the *Front*, which is the way intended by this *Figure*. For the manner of the *firing* it ſelfe, you may partly perceive that there are *intervals* made for each *diviſion*, to *wheel off* to the *right*, that ſo they may either fall in the *Reere* of the Muskettiers, and there continue the *firing*; or elſe fall in the *Reer* of the Pikes, and be thereby *ſecured* from the *Horſe*. It may be done, one or both wayes: according to the *occaſion* or *diſcretion* of the *Commander*. Nevertheleſſe, before I ſhew the *firing*, obſerve theſe words of *Command*, which produce the *Figure*.

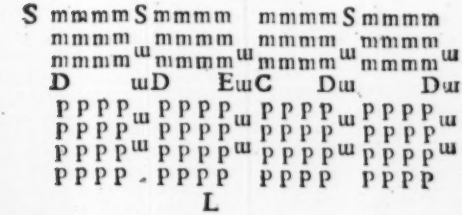
Direction to make the Broad-fronted Batell.

This is intended but for a ſingle Company; for if there be more Companies, then the way firſt ſhewne, is farre the better.

Wheele your flanks into the Front.
Face to your Leader.

The broad-fronted Battell.

Front.



‡ The first *rank* having *preſented*, and *given fire*, let them *wheele off* to the *right*: all paſſing downe the *intervals* to the *right*, and *placing* themſelves in the *Reer* of their owne *diviſions* of Muskettiers: The next ranks of Muskettiers making good their *leaders ground*; *firing*, *wheeling off*, and placing themſelves as before. Having *fired* once or twice over this way, * a ſecond way may be to place themſelves in the *Reer* of their *Pikes*, either *ſtanding*, or *advancing*; the *Pikemen* in the meane time *clouding the cleare skie*, with their *airy Armory*. The *Muskettiers*

‡ *The direction for the firing.*

* *A ſecond way of placing the Muskettiers upon the firing.*

tiers having all *given fire*, and placed themſelves in the *Reer*: if need be, t
Pikes may *cloſe* their *diviſions*, and *charge over hand*: and if the enemy ſhall f
preſſe forwards, the *Pikes* may *charge at the foot*: the *Muſketiers* giving
over them.

The Reducement. Note that the ſecond firing will cauſe the body to face to the reere which then becomes a front accidentall, and is the cauſe that the ſame ommand reduceth the figure which firſt made it.

For reducement, there are diverſe wayes by *firing*, but becauſe I wo
make every thing ſo plaine, and eaſie, that thoſe that read for inſtruction, m
receive benefit, it hath cauſed me to *reduce each figure* by it ſelfe, and no
multiply one upon another, whereby to make them too ambiguous. A
therefore, if you make this *Figure by wheeling your flanks into the front*, and th
fire, as aforeſaid, the *reducement* may be, either to *fire* them over againe, and
to fall into their former places: and then to *wheel your flanks into the Front agai*
and laſtly, *face about to the right*, and they will be as before. Or elſe if you wou
reduce them without giving fire over againe, then command your *Muſketti*
to *double your Front by diviſion*: that done, *wheel both flanks into the Reer*, then *f*
to your leader, and command your *Muſketiers* to *double your front by diviſion aga*
and they are as at firſt. If I ſhould proceed to ſhew the many and ſundry way
of *Firings*, which may be done in *Front*, my Book had need to have as ma
leaves, as *lines*: and yet all too little. But that I may keep my ſelfe to my *p*
maſe, and my *Book* to its *compaſſe*: I will next come to ſhew ſome *firings in t*
reer: and amongſt my *diviſionall firings*, I ſhall inſert ſome other ſorts of *fir*
firings. which here I have omitted.

Chap. 82. *Of diſmarching, or firing in the Reere: the ſeverall wayes, and how th ought to be performed.*

** The benefit and uſe of firing in the Reere.*

HAving ſo long maintained *Battell* in the *front*, I will now *face* them
bout, and ſee how they will behave themſelves upon their *firings* in th
Reer. * Which kind of *firings* may be very *beneficiall* and *ſerviceable*, m
ny waves. For by keeping an orderly *march*, and *firing* in the *reer*, the eager *en*
my, (by too haſty purſuit) may be diſordered. Or if it ſo happen (as many tim
it doth that you have a *diſadvantagious* place to *imbattell* on, by this *firing* yo
may *march away*: ſtill preſerving your *order* and *array*, untill you have brough
your *adverſary* into ſome *ambuſhment* or ſuch like *inconvenience*. * For the man
** Wayes to come to firing in the Reere.* ner of comming to the *firing*, it muſt either be by *facing about*, *wheeling abou*
or *countermarching*: the Pikes are to be *ſhouldred*. The *figure* followeth.

A Firing in the Reer.

The *Body* being upon a *march*; if the *enemy* appeare in the *Reer*; let the *laſt rank* of Muskettiers *face about*; and *give fire*; *then wheel off* by *diviſion file-wiſe, marching up* toward the *Front*, and there placing themſelves before the foremoſt *rank* of Muskettiers (the two *outmoſt* men of each *rank*, being the *leaders up* of thoſe which have *fired*) who are the firſt that take their places on the *out-ſide*, the reſt *wheeling about* them, and *ranking even* with them on the *in-ſide*; ever obſerving, that they *range even* with the *ſecond rank* of Pikes. The reſt of the Muskettiers alſo doing the like: and in this manner to continue the *firing*, as occaſion ſhall require. Nevertheleſſe, of all the *figures* and *firings*, that ever I have ſeen, this hath been the *worſt* performed in all places; which might eaſily be amended, if the *ſouldiers* would obſerve this following direction: namely, when the *laſt Rank* of Muskettiers have *preſented* to the *Reere*, and are giving of fire; the *Rank* which marched next before them, doe then *blow, open*, and *preſent*, at three motions: ſtill keeping along *even with the Body*, untill that, (laſtly) they *preſent* to the *Reer*, by which time, the *Rank* that *laſt fired*, will be *wheeled away*. The next *Rank*, ſo ſoon as the other hath *preſented*, is likewiſe at three *motions*, to doe the ſame: and ſo *ſucceſſively*, for all the reſt; every *Rank* obſerving, upon each *Ranks firing*, to *looſe* one; and to *march* one *rank* neerer to the *Reere* of the *Battell*, that ſo that part, may ſtill be kept firme and abſolute.

The direction for this firing in the reer.

Note upon all firings in the reer, to blow your cole ſtepping forwards with your right foot. Open your pan ſtepping forwards with your left foot. (A little inclining to that hand to which you are to face about) preſent to the reer ſtepping forwards with your right foot.

This *giving* of *fire* towards the *Reer* for *ſervice*, is to be continued; according to the quality of the *place*, the *occaſion* for *fighte*, and the diſcretion of the *Commander*. In *exerciſe*, we commonly doe it but once over; and then (if you pleaſe you may make *Alte*) and *face* your *Body about*, *giving fire* over againe, and *charging* your Pikes upon it; if need ſo require, or at diſcretion of the Commander. Notwithſtanding, if the *horſe* ſtill purſue you in the *reer*, you having gained ſome *ſtrait*, or *place* of *advantage*, may *wheel* your *flanks* into the *front*, then *face* to the *reer*, and with your *charged* Pikes defend your Muskettiers: which (the *body* being ſo *wheeled*) will be in the *reer*. The *body* ſtanding in this *form*, the Muskettiers may *ſleeve up* by way of *Extraluction*. The *manner*, you may perceive in the *Chapter* which treats of that *figure*. If the Horſe ſhall preſſe forwards, cauſe the Pikes to *charge* at the *foot*; the Muskettiers *giving fire over them*, as in the *Convex halfe Moon*. Laſtly, to *reduce* them, having thus *fired*, *command* them to *wheel their flanks into the front* and to *face about* after their *proper file-leaders*, and they are *reduced*. Sometimes, we *give fire* in the *reer*, having all our Muskettiers *marching* in the *reer* of the Pikes. For the *manner* of the *motion*, it is as before: but for *placing* of the men, after they have *fired*; it may be different. As, to *wheel off by diviſion*, placing themſelves in the *front* of the Muskettiers, next behind the *reer* of the Pikes. Or if the *body* be large, to *wheel all off to the right, through Intervals*, and ſo to *march into the front of* Pikes. Or elſe, they may *wheel off by diviſion*, and *flank their* Pikes, and ſo *fire over againe*, as before. If you have brought your Muskettiers (by *firing*) to the *reer*, before the *front* of Pikes, then to *reduce* them, you may either *wheel* the *body* about, and *give fire* in *front*, cauſing your Muskettiers to *fall off by diviſion*, and to *flank* the Pikes, as you may

Wheeling of the the flanks into the front or reer, is moſt uſefull for ſmall bodies.

In Chap. 80.

In Chap.

The *reer* 79. *Reducement. A ſecond order of firing in the Reer. A reducement for this way of firing of in the Reer. In Chap. 76.*

perceive by the figure of the *Demy-hearſe*. Or elſe, if you will *reduce* them without a *firing*, cauſe your Muskettiers to *open to the right* and *left*: and the Pikes *to march up in the midſt*: after which, *facing* all to your firſt front, they are as at firſt.

In Chapter 76.

Many differing opinions concerning firings in the Reare.

I might have ſhewne a Figure for each of theſe ſeverall *firings* in the *reere*; which would have delivered them with more variety: but I conceive that this here already expreſt, may ſuffice: eſpecially this being the ground of what may be ſpoken, concerning *firings* in this nature, many men are of many minds, about this *firing in the Reer*. Some will have it, that the *laſt rank* ſhall at one *motion*, *face* to the Reer, and there preſent and give fire. Others will have it at two motions; but either of them have their inconveniences. For however they pretend a more *ſudden execution*, they are deceived: for would they make triall, by cauſing the *Muskettiers* of one of the *flanks*, to give fire at one motion; and the *Muskettiers* of the other *flanke* at three motions, (as I have here ſet downe) they ſhould ſoone finde, that the firing upon three *motions* were the beſt: and that the other would be caſt ſo farre behinde their *Body*, that they would be in danger to be cut off. Beſides this, they are *longer* in *cleering* themſelves from their owne men, which all the while muſt ſtay, untill they are marched off: or elſe kill them inſtead of the Enemy, whereas in this other *firing* upon three *motions*, they ſtill *keep along* with their *Body*, doing their *execution* more ſuddenly and more ſafely. *Nevertheleſſe, there be many ſo much wedded to their owne willfull opinions, that they will more willingly perſiſt in a knowne errour, then be ſeene to alter, what they have ſeemed to maintain. But leaving ſuch to ſteer by their own compaſſe, I will here conclude my firing in the *Reer*. And the next I ſhew, ſhall be firings in *flanks*: to which purpoſe, I paſſe all my *Muskettiers* to the right flank. The words of direction for it, are theſe.

Firing at three motions to the reer, the beſt.

**There is no error, which hath not ſome ſlippery and bad foundation, or ſome appearance of probability, reſembling truth.*

Muskettiers of the right flanke, open to the right (or face to the right, and march.) When they have opened to a ſufficient diſtance, then ſtand.

Muskettiers of the left flanke, paſſe through betweene your ranks of Pikes, to the intervall on the right flanke: then ſtand, and face all to your leader.

Chap. 83. *Of firings in flanke, in generall, and more particularly, of the gathering firing.*

THe *Muskettiers* being all on the right *Flank* (as in the laſt Chapter is directed,) it would be needleſſe to make a Figure, whereby to demonſtrate the ſtanding of the Body, ſeeing that none can be ſo ignorant, but muſt needs know that all the *Muskettiers* being upon the right, the *Pikes* muſt be upon the left. Nevertheleſſe, I ſhall endeavour to ſhew what is meant by *firing in flanks*. (Which for the generall) are of theſe two kinds. The firſt is, when the *Enemy ſkirmisheth with us in flank*, *as we march*, the other when as by ſome ſudden attempt or ambuſhment, the *party*, *diviſion*, or *whole Body* is engaged, and ſo forced to ſtand, and face to the right, or left, or both: By which *facings*, the Flanks become *fronts accidentall*, and their *firings* will be after the ſame manner of the *firings in Front*. Wherefore ſeeing I have already ſpoken ſufficiently

What is meant by firing in flanke.

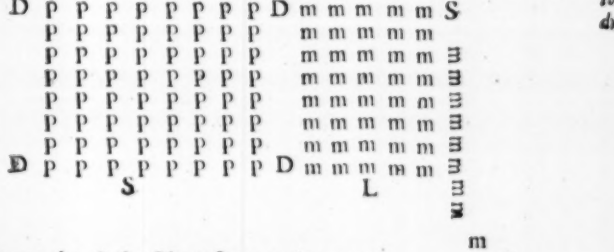
ſufficiently of them. I will now ſhew *Firings in flank*, marching: the particulars whereof, are as followeth. The firſt is for the outmoſt *File*, to give fire, and ſtand untill the next *File* have fired, which by ſome is called the *gathering firing*. Secondly, firings in flanke, and leading them up between the *Muſketiers* and *Pikes*. Firing in flank, being led off by the Bringers up. Firings in rank, ſleeving up on the contrary flank of Pikes. Firing in flank, and drawing them up betweene the innermoſt files of Pikes. All theſe *Firings in flanke*, are to be performed upon a *march*, the *Pikes* are to be *ſhouldred*. Our firſt *firing in flanke*, followeth.

The diverſe & ſeverall waies of firings in flank marching.

Vpon all theſe Firings in flank marching, the Pikes are to be ſhouldred.

The Command is, *Muſketiers, give fire to the right: and gather up your Files.*

Front of the March.



This *firing* on the *flank*, I have ſeene, and knowne uſed, by many good and able Souldiers. Nevertheleſſe, in my opinion, the men ſtand in a great deale of danger, when having given *fire*, they can do no good; but ſtand like ſo many markes for their *Enemies* ſhot. Notwithſtanding, it may be that ſuch whom I have frequently ſeene to uſe it in their practiſe, may be able to render good reaſons for the ſervice; though as yet I cannot conceive it. I will therefore forbeare any further to proſecute my opinions, and ſhew the manner of execution: which is to be performed as followeth. The *Command* being given to *fire* to the *right* marching, preſently the outermoſt *File* to the *right* faceth outward, and *preſents*, the reſt of the *body*, ſtill marching forwards: Then the preſented *File*, *gives fire*, and ſtands *facing againe* to their firſt Front. By that time, the *Body* will be marched cleere of the ſtanding *File*, then the next outermoſt *File*, *preſents* and *fires*, in like manner; the *Body* marching as before: Having *fired*, they in like manner *face* to their *firſt front*, and ſtand, a *Serjeant* leading up the *File*, that firſt *fired*, on the out-ſide of the *File* that laſt *fired*. Then they ſtand both together, untill the third *File* hath given *fire* after the ſame manner; And then the *Serjeant* leads up the two *Files*, even with the third, which laſt fired. After this manner the ſeverall *Files* of *Muſketiers* face to the *flanke*, *give fire* ſucceſſively, and ſtand, untill the *Serjeant* leads up the reſt of the *Files* which formerly *fired*, even with the *front* of the *File* which laſt *fired*. Thus having all

The direction for this firing.

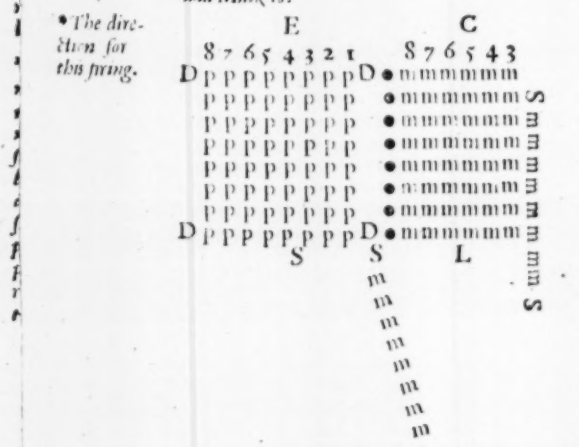
fi ed over, they are to march up againe, even with the front of Pikes, and this reduceth them, as at firſt.

Chap. 84. *The ſecond manner of giving fire to the Flanke.*

IF you would fire in flanke, a more ſecure way, then that laſt ſhewne: take this way of firing, the which ſhall be full as *ſerviceable*, for matter of *execution*, and ſhall farre precede it, in way of *preſervation*: both in *ſecuring* the *Muſkettiers* (after they have *fired*) from the danger of their *Enemies ſhot*: as alſo in continuing the Body *intire*, without ſeparation. It is eſpecially uſefull, when two *Enemies* are divided by a *River*, or by ſome ſuch like meanes ſecured from the *incurſions* of the *Horſe*. For then, by this way of *drawing* the *Muſkettiers* up betweene the innermoſt File of *Muſkettiers*, and the outermoſt File of *Pikes* to the *right*: your Battell may be continued, according to the occaſion or the *Commanders* diſcretion. The *Figure* followeth.

The command is, *Muſkettiers, give fire in flanke, marching up between the Pikes and Muſkets.*

*The direction for this firing.



*The way to performe this *Motion of firing*, is as followeth. The *outermoſt file* being commanded to *face* to the right, and *preſent*, the reſt of the *Body* marcheth away, as in the other Figure, and the ſtanding File gives fire. This done, and that the Body is *marched cleer* of the *ſtanding File*, the next File *preſents* to the *right*, and the File that firſt gave fire *faceth* to the firſt *Front*, and is led by a *Serjeant*, *croſſe* the *Reere* of Muſkettiers, and up betweene the Muſkets and Pikes; the Muſketiers are *ſtill* to *open* to the *Reer* of *Muſkettiers*, and up betweene the *Muſkets* and *Pikes*; the *Muſkettiers* are *ſtill* to *open* to the *right*, as they *march*, that ſo there may be *roome* for one *File* to *march* up betweene them, and the Pikes. And ſo ſucceſſively each *File* having *fired*, marcheth up next unto the *right flanke* of Pikes. When all your Muſkettiers have given *fire* once over, they are *reduced* as at firſt. The *Battell* may be continued at diſcretion. The next firing in *flanke* (or the manner of execution) will be all one with this: the difference will be in the *wheeling off*, and *placing* the *Muſkettiers* after the have *fired*.

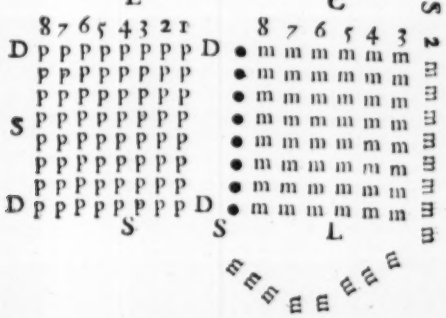
The firing being performed once over, they are reduced as at firſt.

Chap.

Chap. 85. *A firing in Flanke, led off by the Bringers up.*

THe next *firing* in *flanke*, which I propound to your peruſall, will be nothing differing for *manner* of *execution*, from the *firings in flank*; formerly ſhewed. The onely *difference* ariſing betweene them, is, that the *other Files* of *Muſkettiers*, after that they had *given fire*, were led off by their proper *File-leaders*; and this to the contrary, muſt be led off by their *Bringers up*. And this indeed, if the Body be upon a *ſlow march*, is the *readieſt* and *quickſt* way: and doth more ſpeedily ſecure the *Muſkettiers*, after they have given fire. The words of *Command* and *direction*, which produce the *firing*, are as followeth. *Muſkettiers give fire to the right: wheeling off, after your Bringers up; and placing your ſelves betweene your diviſions.* *The uſe of this firing in flanke.*

Front.



For the manner of *execution*, or way to performe this *Firing*, it is as followeth. The *Body* muſt be conceived to be *marching*, upon all theſe *Firings* in *flank*: and that with their *Pikes ſhouldred*. This being preſuppoſed, the *Command* being given, the *outermoſt file preſents* to the right, and gives *fire*: then *faceth to the right*, after their *bringers up*, who leadeth them off, croſſe the *reer* of *Muſkettiers*, marching *them up* between the *diviſion* of *Pikes* and *Muſkettiers*, the *Bringers up* ſupplying the *file-leaders* place; and *marching even* in ranke in the *front*, with the *file leaders*; the *file-leader* of the ſame *file*, becomming the *bringer up* in the *reer*. The *files* of *Muſkettiers*, or *Pikes* (according as the *command* ſhall be given) are as they *march*, to *open*; thereby giving way to the *Muſkettiers*, after they have *fired*, to *come up* between the *diviſions*, and ſo ſoon as the firſt *file* that *fired*, is cleare from the *right flank*; the ſecond *file*, *preſents* and *fires*; in like manner *wheeling off*, as before, and *marching up* between the *Pikes* and *Muſkettiers*; every *file* ſucceſſively, *giving fire*, and *wheeling off* as aforeſaid. This *firing* may be performed *once*, *twice*, or *oftner over*: according to the diſcretion of the *Commander*. * Nevertheleſſe, if it be *twice* performed, the men are *reduced* as at firſt; every man having his *right* place. If you *fire* them but *once* or *thrice* *The direction for this firing.*

* *The firſt firing is reduced by doing the ſame over againe.*

Another way of placing the Muſketiers, when they are led off by the bringers up.

thrice (or any odde number of *times*) over, then your muſt *countermarch* your *files* of *Muſkettiers* to reduce them. There is another way for the *bringers up* to *wheel off*, and each of them to *lead off*, his *file*; untill he comes to the *reer* of the *diviſion* which is between the Muskets and the Pikes; and there he is to ſtand, and *rank* with the *bringers up*, the reſt that follow, *paſsing* on *forwards*, by way of *Introduction*, and every man *ranking* before him, that was his *leader* in the *wheeling off*; untill the proper *file-leader* be come into his *place* againe. And after this *way*, they may *give fire*; each *firing* being his own *reducement*.

Chap. 86. *The differences between Firings in Flank, marching: and of bringing the Muſkettiers on the outſide of the Pikes.*

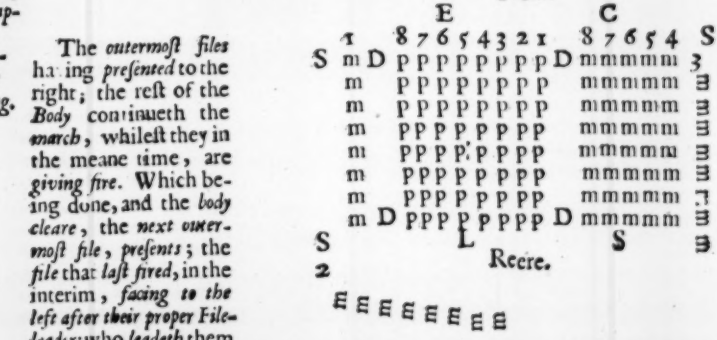
ALL, or the moſt part of the *firings in flank*, which are performed *marching*; in point of *execution*, are the ſame: the eſpeciall *difference* between them, being either in the *manner* of *wheeling off*, after they have *fired*, or in the *materiall placing* them, whereby to make them more *offenſive* or *defenſive*. And this appeareth by the next following *firing*: which is to be uſed at ſuch time and place, when as there may be doubt of the *enemies horſe*: And, therefore, for the more ſecurity of the *Muſkettiers* after they have *fired*; they are to be *drawn up* on the *outerſide* of the *left flank*: *if happily there may be ſome *hedge, ditch, river, hill, marish, wood*, or ſuch like convenient *ſafeguard*; whereby to ſhroud them from the *fury* and *violence* of the *horſe*; that ſo the Pikes making *Alt*, and *facing* to the *enemy*, may *charge*, and with their *armed points* (ſtrongly and cloſely coucht) *receive* and *abate* the fury of the firſt *shock*. And if need be, the Pikes may all *charge* at the foot, cloſely *ſerried* together, with their *ſwords* drawn, and the *Muſkettiers* may *give fire* over them. * But leſt I *anticipate* my ſelfe, in ſhewing the *uſe*: I will returne to ſhew the *manner* of the *firing*, intended by this following *Figure*. Onely firſt take the *words* of *Command* and *Direction*, which are as followeth.

** Scituation of place, often affords good help in time of need, to the artfull and induſtrious Souldiers.*

** Or elſe a better way is to give fire by extraduction; as in Chapter 80. The direction for this firing.*

Muſkettiers, give fire to the right: placing your ſelves on the outſide of the left flank of Pikes.

Front.



The *outermoſt files* having *preſented* to the right; the reſt of the *Body* continueth the *march*, whileſt they in the meane time, are *giving fire*. Which being done, and the *body cleare*, the *next outermoſt file*, *preſents*; the *file* that *laſt fired*, in the interim, *facing to the left after their proper File-leader*; who *leadeth* them *croſſe* the *reer* (both of Muskets and Pikes) a pretty round pace *ſleeving* up on the outſide of the *left flank* of Pikes. The next *file* having in like manner,

ner, *fired*; doth alſo *troop up* on the *out-ſide* of the *file*, *led off* before; every *file* *giving fire*, and doing the like. When all have *given fire*, and are *cleared* away, then the Pikes may charge. Which is very neceſſary, to accuſtome the *Souldiers* unto in times of *exerciſe*, both for *charging* on, and *retreiting*, as alſo to puſh with their Pikes, that ſo by *practiſe* they may be able to doe it *orderly* either way, ſtill keeping their *order* and array. Having *given fire* upon the *right flank*, and *drawne* all your Muskettiers in this manner to the *left flank*, if you will cauſe them to *give fire* on the *left flanke*, and *bring* them back againe to the *right flank*, they will be *reduced*. Or if you would *reduce* them without a *firing*, then either *paſſe* your Muskettiers through between your *Ranks* of Pikes, or elſe let your whole *diviſion* of Muskettiers be drawne croſſe, either the *front* or *reer* of Pikes, into their places: or by *diviſion* (if you pleaſe) your Muskettiers, alſo, may *give fire* in *flank*: the *firſt file fleeving up* on the *left flank*: the reſt of the *files*, ſtill falling between the Pikes: and the Muskettiers which *wheeled* off the *laſt* before them. And this is alſo a very good *firing*, and may be *reduced* with doing the like back againe: and many other waves, they may alſo *fall off* after the manner of the *figure* laſt ſhewn: being *led* by their *bringers up*, either into the *front*, or elſe after the manner as is diſcourſed in the latter end of the laſt *Chapter*. But I endeavour, all I may, to contract my matter, leſt my *volume* ſhould exceed my intent. And therefore I will ſhew but one *firing* more in *flank* upon a *march*: wherewith I will conclude theſe ſorts of *firings*.

It is good to accuſtome the Pikes to charge.

They may be reduced by interchanging of flanks.

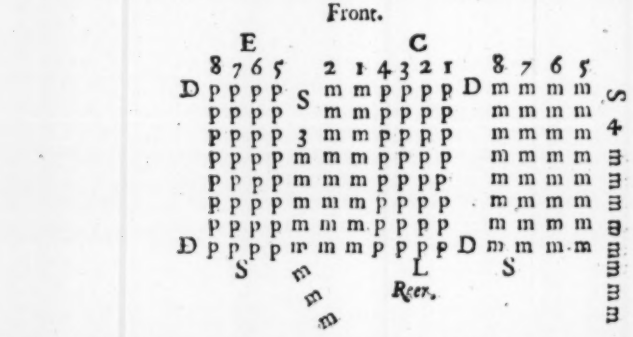
Chap. 87. *Of firing in Flank, and placing the Muskettiers in the midſt of the Battell of Pikes: with other firings From thence proceeding.*

FIring in *flank*; and *bringing* them *off* between the midſt of *Pikes*; is to be uſed at ſuch time, when as you would ſecure your *Muskettiers*: the place (otherwiſe) affording no *naturall convenience* of ſuccour, ſuch as I have formerly ſpoken of: and therefore by this manner of *Falling off*, where we want *naturall* aſſiſtance in the *ſcituation*; there, *art* ought to ſupply us, namely, by contriving to bring up the *Muskettiers* between the *Pikes*, and ſo to defend them from the fury of the *Horſe*. And, if need be, you may *draw* three or foure *files* of *Pikes* (more or leſſe, according to your *number*, or the *danger*) croſſe the *Muskets* both in *Front* and *reer*, which are in the middeſt between the *Pikes*, which will as well preſerve the *Muskettiers* in *Front* and *reer*, as in *Flanks*. But leaving further to diſcourſe what may be done; I will now ſhew how this is to be done. Onely firſt take the *words* of *Command* and *direction* for the *firing*, as followeth.

The uſe of this Firing.

Muſkettiers, give fire to the right: marching up between the midſt of Pikes.

Front.



The direction for this firing.

The *Command* being given, for the *outermoſt-file* to *preſent* to the *right* (as formerly in the *Firings* in *Flank*) the reſt of the *body* ſtill *marching* on, untill that the *outermoſt file* hath *Fired*, and is *faced* to the *left* againe, following their *leader*. He now now leading them *off* to the *left*, *marcheth up* between the *middlemoſt-files* of Pikes; who are then to *open* to the *right* and *left*, ſo to give them *room* to *march* up *between* them: In the meane time, the *next file* having *given fire*, *wheeleth off* in like manner, *marching up* on the *left* of the *file*, which *fired* laſt before them. And ſo ſucceſſively, for all the reſt of the *files* of Muſkettiers, all which are to give *fire*, and to *wheel off*, as aforeſaid, placing themſelves ſtill on the *left* of the *files* which laſt *fired*. Wherein is ſtill to bee noted, that the *files* of *Pike-men* are ſtill to *open* to the *right* and *left*, and that for the receiving of the Muſkettiers, after that they have *given fire*. This *firing* (as all other the *firings* in *flank*) may as well be *led off* by their *Bringers up*, as by the *file-leaders*: and then the *reducements* will be anſwerable. The Muſkettiers having all *fired*, the Pikes may *charge* at diſcretion. The *Bow-Pike-men*, which are in the *reer* of the Muſkettiers, in the meane time not ſparing to ſend their *showres* of *arrowes*, amongſt the thickeſt of their enemies, and if need require, the *Frent* of Pikes *charging* at the *foot*, with their ſwords drawn; the Muſkettiers may *give fire* over them, *rank* after *rank*; for the *formoſt ranks* having *fired*, may *kneel* upon the ground; and there make *ready* againe: untill the other *ranks* behind them, have likewiſe *given fire*. After this manner the *Battell* may be continued: according as occaſion ſhall require. For *reducement*, and to bring the *Muſkettiers* into both *flanks* againe, as they were before in theſe *firings* in *flank*; *command* your *Pikes* to *face inward*, and your *Muſkettiers* to the *right* and *left outward*, and ſo to paſſe through, and *interchange ground*; then *facing* them to their *leader*, they will be *reduced*, as at the firſt. I would have the ingenious *Reader* to conceive, that all theſe *firings* in *Flank*, may as eaſily bee performed to the *left*: and with the ſame *words*. Onely the *words* of *right*, muſt bee changed for *left*; and *left* for *right*. I might have further inlarged my ſelfe upon *Firings* in *Flank*: but theſe already expreſt, may ſuffice for to inſtruct the ignorant. As

Whilſt the firſt diviſion of Pikes charge, the reer diviſion of Pikes (having bowes) may doe good ſervice againſt the hoſe.

Reducement.

for

for the skilfull and experter ſort of *Souldiers*, I ſhall rather requeſt their approbation, then preſume to writ ought, which may ſeem to paſſe me with the leaſt conceit, tending to their inſtructions. Wherefore, for the further proſecution of my intended diſcourſe, I will next ſhew ſome *diviſionall Firings*. And (for *methods* ſake) I will firſt begin with firings in *Front* and *Reer*: which may be performed either *marching* or *ſtanding*. And to that end, ſuppoſe your Muskettiers to march all in *Front* and *Reer*. Nevertheleſſe, becauſe it will not be amiſſe, to ſhew with what words of *command* and *direction* the Muskettiers may be brought thither: therefore take notice from what part of the *Body* they are taken. And if they be in the midſt (as by this laſt *firing* in *flank* they were brought) then command the halfe *files* of the *Muskettiers* to face about: which done, let the *Pikes ſtand*, and the *Muskettiers march*, untill they are cleare both of *Front* and *Reer* of *Pikes*, then let them *ſtand*; and *face* to their *leader*: which being done, your *battell* will ſtand in forme of an *hollow ſquare*. In which hollow, may be conveyed any carriage, or ſuch like. But if you will not have your *battell hollow*, then command your *Pikes* to cloſe their Diviſions; and the *Muſkettiers* will be all in *Front* and *Reer*. If your *Muskettiers* be on the *flanke*, and you would bring them into the *Front* and *Reer*,, then after the ſame manner let the halfe files of *Muskettiers* face to the *Reer*: and then both halfe Files of the *Front* and *Reer*, march untill they are cleer of the *Angular* Pikemen. This done, let them face in **oppoſition*, and cloſe their *diviſions*: after which, having faced all to their leader, they will be rightly placed; namely, the front halfe files of *Muskettiers* before the Front of Pikes. Thus will the *Battell* be ſomewhat neere the forme of an *Hearſe*, and the *Muskettiers* be ready to *give fire* to the *Front* and *Reer*, either *marching* or *ſtanding*. But before I begin my *diviſionall firings*: I would intreat you not to expect, that I ſhould reduce every particular firing, ſo ſoone as it is performed; as I have done by theſe hitherto ſhewed, but rather let it be ſufficeable to your likings, that I *reduce firings* by *firings*: ſometimes giving fire upon a *March*: ſometimes upon a *ſtand*, ſometimes to the *Front* and *Reer*, ſometimes to both *Flanks*. I doe rather deſire to goe in this way, becauſe thereby I may expreſſe farre more matter in fewer lines and ſhorter time.

The direction how to bring the Muskettiers to the front and reer either from the midſt or flanks.

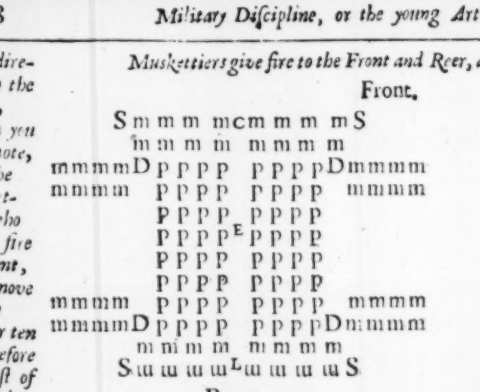
* *That is the front halfe files of Muskets face inwards, and the reere halfe files of Muskettiers face inward: then cloſe together, before the Front and behind the Reer of Pikes. Your Figure takes the denomination of an Hearſe, when the depth doth manifoldly exceed the length, which muſt be thrice at leaſt.*

Chap. 88. *Of firing to the Front and Reer, upon a March.*

THe *Muskettiers* being all placed in the *Front* and *Reer* (according to the directions in the laſt Chapter) I will now ſhew the manner of *firing* to the *Front* and *Reer* upon a *March*. Which howſoever that it may be rare, and ſeldome uſefull in ſervice, yet it muſt needs be *excellent* for *practice*. For by the often uſing it, the Souldier may be made capable of *any firing*: The *Pikes* (you are to underſtand) are to be *ſhouldered*. The Command for the *firing* is,

Muſkettiers give fire to the Front and Reer, and ſtank your Pikes.

Front.



Reere.

* The *Command* being given (as above ſaid) the *firſt ranke preſents*, the *laſt ranke faceth about to the reer*, and doth the like, and ſo both *giving fire* together, *wheel off by diviſion*. The one *halfe* of the *ranke*, following after the *right hand man* of the ſame rank, the other halfe after the *left hand man*, who leades them cloſe downe by the *ſide or flanke* of the Muſkettiers untill they come to the *Pikes*. The firſt ranke of *Muſkettiers* now ranking even with the firſt ranke of *Pikes*; the laſt ranke of Muſkets, with the laſt ranke of Pikes, leaving a ſufficient *interval* betwixt them and their Pikes, for the other Muſkettiers to march betweene. And here you muſt note, that he that was the outermoſt when they gave fire, muſt likewiſe be outermoſt when they have taken their places on the *flanke*. The firſt and laſt Ranks having *fired* and wheeled off, the next Ranks (marching on as before; the firſt rank eight or ten paces before the *Front*, the laſt rank at three ſteps to the *Reer*) are in like manner to *preſent*, and *give fire*, wheeling off by diviſion, and paſſing betweene the diviſions, * there placing themſelves, they of the *Front* diviſion behinde thoſe which fired laſt before them, and they of the *Reer* diviſion before them which fired laſt behinde them, and ſo they may continue to give fire, untill they have all fired once over. Then may the *Body* make a ſtand, and the *Pikes* charge to the *Front* and *Reer*, if need be. Or if the *Commander* would continue his firing to the *Front* and *Reer* ſtill upon the ſame *Figure*: Then let the *Muſkettiers* of the *Front*, place themſelves (after they have given fire) behinde the *Muſkettiers* of their owne Diviſion: thoſe of the *Reer* Diviſion placing themſelves betwixt the *Reer* of *Pikes*, and the *Muſkets* of their owne Diviſion, and ſo the Body moving but ſlowly forwards, they may continue the firing. Having given fire to the *Front* and *Reer*, and ſtanked their *pikes*: if the occaſion offer, or the *Commander* pleaſe; they may give *fire* to the *Front* and *Reer*, upon that *Figure*, which indeed I hold the better, as you may perceive in the enſuing Chapter.

* *The direction to the firing, wherin you are to note, that the Muſkettiers who are to fire in Front, are to move nimbly eight or ten paces before the reſt of the body that ſo they may have fired and wheeled away before the reſt of the body be ſo farre advanced. But if your body be large, ſend a diviſion before which will be the better way.*

* *Note this direction. If need be the Body may make Alt, and charge to the Front and Reer.*

Chap. 89. *A ſecond way of firing to the Front and Reer.*

THis ſecond way of firing to the *Front* and *Reer* upon a march, may eaſily be performed, if the Souldiers be well and often inſtructed. Without which, all matters in the *Art Military* will ſeem difficult, and by which,

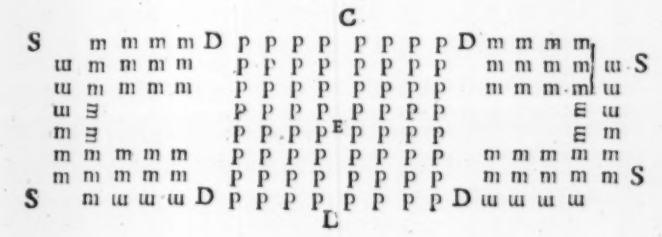
all

all things will be made facile and eaſie, I could inſtance in divers Motions and Figures, (by ſome reputed ſuperfluous niceties) which were the true uſes knowne to the *Commander*, and the way to execute to the Souldier, would be found to be of ſingular good ſervice. *Nevertheleſſe, becauſe to the ignorant, nothing beyond their capacities may ſeeme excellent, many good and ſerviceable motions are ſlighted, and not accounted fit for ſervice. But I could well wiſh, that ſome good courſe might be taken, that the Souldiers of our trained Bands might have a little oftner practice, that ſo they might be able (at leaſt in ſome reaſonable way) to underſtand and *exerciſe*, what ſhall be commanded them. But I have ſtrayed from the matter, and therefore take theſe words of *Command* and *direction*, which being orderly executed, produce this *Figure* following.

* *Ignorant Souldiers account thoſe things niceties, which they underſtand not.*

Muskettiers, give fire to the Front and Reer, placing your ſelves betweene your Diviſions.

Front.



Reer.

The way to performe this firing is as followeth (the command being given) The firſt *rank* advanceth eight or ten paces before the *Front* of the *Body*, there *preſenting and firing*: the laſt *Rank* of *Muskettiers* in the interim, *preſenting* at three motions to the *Reer*, and there in like manner *firing*, which done, they are to wheele off to the *right* and *left*, placing themſelves betweene the *Muskettiers* of their owne diviſions. Thoſe namely, which were of the *Front* halfe files, falling into the *Reer* of their owne diviſion, thoſe of the *Reer* halfe files (contrarywiſe) falling before their halfe file leaders, and ranking even with the halfe file leaders of *Pikes*, the next ranks ſucceſſively, firing and wheeling off, after the ſame manner. *Having fired once over, they are reduced, every man to his place.* Theſe two laſt firings to be performed upon a *march*, would ſeeme very difficult to *unexperienced Souldiers*, but by often exerciſing they may be made capable of theſe, or of any other. Nevertheleſſe, the ſpeciall uſe of this *firing*, is for ſmall Bodies; being charged in *Front* and *Reer* by disbanded *ſquadrons* or ſmall parties: but if your Body be large, the beſt way will be to ſend out a conſiderable number of Muskets and Pikes before, to beat off the *Enemy*: or if they be not able to beat him off; then to hold him up, untill you have made good your *retreit*, and can either re-inforce them with a new ſupply; or releeve them by bringing of freſh hands to maintaine the fight.

The direction for this firing to the front and reere.

Reducement.

Chap. 90. *Firing to the Reer and right Flank marching.*

The uſe of this firing.

HAving already ſhewne *firings* in *Front*, *Reer*, and *Flanks*, (ſome marching, ſome ſtanding) I will now ſhew one firing to the *Reer* and right *Flank* upon a *march*. The which without all queſtion muſt be very ſerviceable at ſuch times, as the obſequious and vigilant Enemy, ſhall find ſome opportunity to Skirmiſh with the *Body*, ſeeking to annoy them in their paſſage or march, charging them in the *Reer* and *Flank* at one and the ſame time. I ſhall not need with arguments to enforce the uſefulneſſe of the *firing*, for none that knows any thing in the *Art Military*, but will ingeniouſly confeſſe, that in time of motion, either *advancing* or *retreiting* out of an Enemies Countrey, they ſhall be ſure upon all advantages to be waited upon by enemies, *charging* in this nature.

I might be infinite in examples of this kind, both ancient and moderne, but my intent is not to write a Hiſtory, every houſe and ſhop being ſufficiently ſtor'd with works of that nature, and my task being only a few directions, for the better improvement of the exerciſe of *Foot Companies*, the which I have hitherto endeavoured to keep my ſelf cloſe unto, and not flown out into extravagant and forreign diſcourſes. Although I cannot deny but that the ſeaſonable recitall, and intermixture of *Hiſtory*, would much have beautified and imbelliſhed the Worke, as delivering it more fragrant to the ſence, and conducing with more delectation to the benefit of the memory: but it is not my intent to raiſe my labours, to ſo large a volume, nor indeed can I ſpend ſo much time from my more neceſſary affaires, but ſhall reſt well contented to leave ſuch large labous to the abilities of the learned, who with their artfull Inventions may be able to garniſh out their workes, with more attracting tearms, whilſt I in the meane time, according to the meaſure of my talent, proſecute my inſuing diſcourſes.

Muſkettiers, give Fire to the right and reer, placing your ſelves between the Pikes, and your owne diviſions.

Front.

E C

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p p p p p p p p • m m m S

p p p p p p p p • m m m ∃

p p p p p p p p • m m m ∃

p p p p p p p p • m m m ∃

p p p p p p p p • m m m ∃

p p p p p p p p • m m m ∃

D p p p p p p p p D • m m m ∃

L S ∃

• • • • • • • • ∃

m m m m m m m m

m m m m m m m m

m m m m m m m m

S w w w w w w w w S

Reere.

Waies of firing to the Flanke and Reer.

You may, (if you pleaſe) fire to the Flanke and Reer: your Muſkettiers being in their ordinary places on the Flanks of their Pikes. Nevertheleſſe, a ſecurer way for the *Pikes*, will be to draw the *Muſkettiers* from that *Flank* which is in leaſt danger croſſe the *Reer* of *Pikemen*. And this ſhall be the way I will obſerve in this *firing*: the words of *Command* are as followeth.

The direction for this firing.

The *Command* being given (to fire to the Reer and right Flank) the outermoſt File of *Muſkettiers* preſent to the right, and the laſt rank of *Muſkettiers* preſent to

to the *Reer*, and both give *fire*: the reſt of the Body, in the meane time, marching a reaſonable pace: the right hand *file* and laſt *rank* having fired; the *file* faceth to the left, after their File leader; and ſo marcheth up betweene the Muskettiers of the ſame diviſion, and the Pikes; the *rank* wheeling off to the right, and placing it ſelfe next after the *Reer* of *Pikes*, and before the firſt *rank* of *Muskettiers* of the ſame *diviſion*. * If you pleaſe, you may make an *Interval* betweene the *Muskettiers*, that part may wheele off to the *right*, on the *outſide*, and the other part wheele off to the *right*, and march up betweene the *Interval* into their places. The firſt *file* and *rank* that preſented, having given *fire*, and wheeled cleer off the *Body*, the next *file* and *ranke*, *preſent* and give *fire*: after the ſame manner wheeling off, and taking their *places*, as aforeſaid; and ſo ſucceſſively, the reſt (both *files* and *ranks*) give *fire*, obſerving the ſame *order*. And having given *fire*, *once*, *twice*, or ofner over, they are ſtill reduced to the ſame they were before the *firing* began. Then draw your *Muskettiers* from the *Reer*, to the left *flank* againe; and they will have their places as at firſt.

* *If there be too many to wheel off together, then make one interval, or more as the occaſion requireth.*

Reducement.

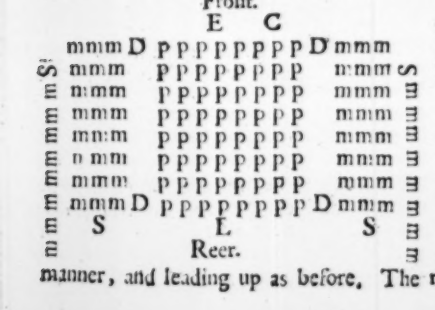
Chap. 91. *Of firing to both Flanks, marching.*

FIrings, to *both Flanks marching*, without all peradventure are as requiſit to be *practiſed* in times of *exerciſe*, as neceſſary to be *uſed* in times of *danger*: when the *politick* and *nimble enemy*, ſhall *lye beating* upon your *Flanks*, thereby ſeeking to *diſtreſſe* you in your *paſſage*, or *force* you to *Alt*, perhaps to your greater *diſadvantage*. For the *manner* or *way* to performe the *firing*; it muſt have reference, to the *time*, *number*, *place*, and *ſtrength* of the *enemy*: with other like circumſtances conſiderable, by the *diſcreet* and *well-adviſed* Captain: and accordingly to *draw off* his *Muskettiers*, either for *ſecurity*, or *advantage*. Sometimes placing them between their own diviſions, and the *Pikes* (as in this following firing) at other times, placing them, * betwixt the midſt of their Pikes, the better to ſecure them.

* *As in Chap. 87. which is a very good firing if the Souldiers be well exerciſed.*

Divers other ſuch like waves there are to bee uſed at the diſcretion of the *Commander*; and as the preſent occaſion ſhall require. *But becauſe I inſiſted ſomewhat largely upon the firings on the right Flank, I ſhall not need to ſhew them again, by diviſion on both Flanks*, but will conclude them all in this one. The words of *Command* which produce the *firing*, are as followeth.

Muskettiers give fire to both Flanks, and then place your ſelves betweene the Pikes and your own diviſions.



‡ The *Command* being given, the *outermoſt file on each Flank preſents outward*, the reſt of the body ſtill continuing the march. The *preſented files* (in the interim) *giving fire*; then *facing* after their *proper file-leaders*, who are to lead them up between the Muskets of their own *Diviſions*, and the Pikes. In the time of their *wheeling* away, the *next two files* preſent, firing after the ſame manner, and leading up as before. The reſt (ſucceſſively) doing the like, untill

‡ *The direction for this firing.*

untill they have *fired all over*: which brings them to their former places. The *Firing* may bee continued at diſcretion, each *firing* being its owne *Reducement*. Nevertheleſſe, it may ſo fall out, that either through the *fury of the enemy*, advantage, or diſadvantage of the ground (or ſome ſuch like accident) the Body may be *forced to make Alt*, and to face to both flanks; and ſo with *Fronts accidentall*, to maintain the *fight ſtanding*. To which end, the Firing in the ſucceeding *Chapter*, ſhall be of that ſort. Therefore *ſuppoſe the Body faced to the right and left*, preparing to give Fire.

The Muskettiers having given fire all over, they are reduced to their places, as at firſt.

Chap. 92. *A Firing to both Flanks ſtanding.*

FIring to *both Flanks*, upon a *ſtand*, is a good and ſerviceable firing. And although it ſhew but thin in the Figure, yet it may be uſefull for the *Field*: eſpecially if there be a *larger proportion of number*, then I have made uſe of in my *Forms* and *Figures* of *Battell*. The words of *Command* and *Direction*, which produce the *figure*, are as followeth.

‡ *direction for this firing.*

Advance your Pikes and ſtand, Face to the right and left, Muskettiers give fire and flank your Pikes.

‡ The Body being *faced* to the *right* and *left*, the formoſt *ranks* of *Muskettiers* (which were the outermoſt *files*) preſent and give fire, and then wheele off by diviſion, ranking even with the formoſt *ranks* of *Pikes*, and leaving ſufficient *intervals* for the reſt of *Muskettiers*, to march betweene them and the *Pikes*. The next ranke preſenting and firing after the ſame manner, * but not advancing forwards: onely firing upon the ſame ground, and wheeling off by diviſion; afterwards paſſing downe betweene the *intervals*, and ſo ranke after their leaders. It is herewithall to be noted, that they that were outermoſt when they gave fire, are likewiſe to be ſo when they have taken their places, If theſe inſtructions be not ſufficient, turne back to the Figure of ‡ the *Demy-hearſe*: where the manner of the execution is all one with this. All the ranks of *Muſkettiers* having fired and wheeled off as before; the *Pikes* if need be may charge, and the *Muskettiers* give fire over againe, wheeling off outward, and placing themſelves in the *Reer* of their owne *diviſions*, having advanced your Pikes, and faced your Body to the firſt *front*, all your *Muskettiers*

* *Upon ſome occaoccaſions it will be neceſſary for the Muskettiers and Pikemen to advance into the leaders ground, but then ſuch direction will be given.*

‡ *The Demyherſe, in Chap. 76.*

tiers will be in *Front* and *Reer*. And then if you *face your half files about*, and give fire after the ſame manner to the *Front* and *Reer*, having faced them againe to their firſt *front*, they will be reduced, as at firſt, into their ordinary ſquare. Nevertheleſſe, I will reduce it by another firing, which was firſt invented and ſhewed us by that worthy *Citizen*, and excellent *Souldier*, Captain *Henry Waller*, now deceaſed, It is a firing in *Front*, the *Muſkettiers* of the *reer diviſion*, opening to the *right* and *left*, and *ſleeving upon the* ranks of *Pikes*, untill the leaders of the *reer Diviſion* (who as then are the *half-file-leaders*) rank even with the *Front* of *Pikes*. The words of *Direction* that produce the *figure*, follow in the next Chapter.

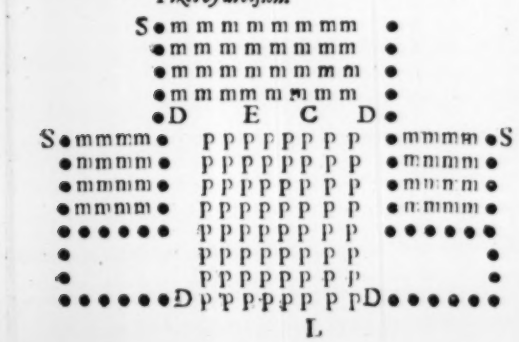
This facing brings all the Muſkettiers to the Front and Reer: if you would bring your Muſkets into their firſt place, let them give fire and wheel off as before, which will reduce them again to the flanks.

Chap. 93. *Captain* Wallers *Triple firing to the Frone.*

THis *Triple firing* to the Front, hath had the approbation of good and well experienced *Souldiers*, who have all acknowledged it to be both *ſolid* and *ſerviceable*: Bringing many hands to fight in very good order, the *Pikes* being ſecurely covered by their *Muſkettiers* in *Front*, neither need they be idle in time of Battell, if they have any * *Bow-Pikemen* amongſt them, for that they may ſend their *Wiſtleing Archery* over their Muſkettiers heads, without offence to their Friends: though not without dammage to their Enemies. If any carp at the depth of the Muſkettiers (either in this Figure or in any other in this Book) I ſhall requeſt them to ſuſpend their cenſures, and wiſely to conceive by a little, what a great deale meaneth. My intent not being, to make my Book *monſtrous*, by having little leaves, and large Figures. Onely I deſire with this ſmall number to ſhew the nature of ſeverall *forms* and *figures* of *Battell*, the manner of their *firings* and *wheelings off*, their orderly placings, and ſeverall waies of *reducement*: not having the leaſt conceit to induce any to belie e, that men are able long to continue an orderly execution at 4 deep, although (ſometimes, for *ſtratagems*) they may be reduced into a leſſer number. But leſt by digreſſion, I too farre treſpaſſe upon your patience, I will return to ſhew the manner of the *firing*. ‡ Only firſt obſerve the words of *Command* and *Direction*, which produce the following *Figure*.

* *The Bow faſtned to Pike, may doe good ſervice: where the Souldier is skilfull, and the enemy comes within their danger.*

Muſkettiers of the Reer, double your Front of Pikes by diviſion.



‡ *Note that in the foregoing Chapter, the Muſkettiers were left in the Front and Reer: The direction over the figure, Commanding the reer Sqadron of Muſkettiers to march up and range even with the front of Pikes, which perfects this Figure: ſome have miſtaken, ſuppoſing I had formed this figure with them words; Conceiving all the Muſkettiers before that Command on the Flanks.*

To direction for his firing.

The command being given, *the first rank of Muskettiers (both of Front and Flanks)* present to the *Front* and give fire: wheeling off to the *right* and *left* by *division*. The *Muskettiers* of the *Front division* being wheeled off (as aforesaid) close by the *Flanks* of their owne *Muskettiers*, passe directly down between the *intervals*: and place themselves even in rank behind the *Muskettiers* of the *Reer division*, which are upon the *flanks*. This you may perceive by the pricks, that come downe betweene the *intervals*: the *Muskettiers* also, that *fired* the same time on the *flanks*, wheele off in like manner; (the *right flanke* to the *right*, the *left flank* to the *left*) marching directly down, even with the *Reer rank* of *Pikes*; there place themselves againe, even in rank with the last Ranke of *Pikes*. This done, the rest of the *Ranks* (successively) *give fire*, and doe the like: every *Ranke* taking his place, after the *Rank* which *fired* last before them; the other *ranke* moving one *ranke* forwarder. * The *Muskettiers* having *given fire* once over; and falling off according to this direction, they will be reduced to the *flanks* againe, as they were at first, in the former Chapter. The firing may be continued, or the Pikes may charge, at discretion of the *Commander*.

**The Muskettiers having fired once over, they are reduced again to the flanks.*

Chap. 94. *The Demie-Plinthium; being a Tripartite firing, doing execution to the Front, Reer, and right Flanke.*

FIgures and *formes* of *Battell*, may be infinite: according to the judgments of the *Commanders*, and the various workings of the divers *motions*: no *art* nor *science* yeelding more content, unto the studious *practitioners*; none more *honorable* and *beneficiall* for the good of our *Countrey*: none more *neglected* and lesse *countenanced*, then the *practisers* of the *Art Military*, nor none more *scrued up* in the places of their abiding, then those men this way affected. * Our rich *gown-men*, holding it as a *maxime*, *That Souldiers* (though Fortune hath been but sparing in their portions) *yet they must be taxed in the Parish-bookes like grounded Gentlemen*. Thus much incouragement we have, for spending our money and our time for our Countries good, and this (in good time) I hope will be amended. The next *firing* being a *firing tripartite*; doth *execution* to the *front*, *Reer*, and *right flanke*, at one and the same time: For the *use*, I shall refer it to the judgment of the judicious; for instruction how it is to be *made*, the words of *command* and *direction* shew it, which are as followeth.

** The common speech being (oh let him pay) hee hath money enough to spend upon his exercises of Souldiery.*

Half ranks of the left, double your right flank by division

Front proper.

S	m	m	m	m	D	p	p	p	p	
	m	m	m	m		p	p	p	p	
	m	m	m	m		p	p	p	p	
	m	m	m	m		p	p	p	p	
										S
	p	p	p	p	D	m	m	m	m	m
	p	p	p	p		m	m	m	m	m
	p	p	p	p		m	m	m	m	m
	p	p	p	p		m	m	m	m	m
		L			E					C
	p	p	p	p		m	m	m	m	m
	p	p	p	p		m	m	m	m	m
	p	p	p	p		m	m	m	m	m
	p	p	p	p	D	m	m	m	m	S
	m	m	m	m		d	d	d	d	
	m	m	m	m		d	d	d	d	
	m	m	m	m		d	d	d	d	
S	m	m	m	m	D	d	d	d	d	

Front of the right Flank.

Front of the Reer.

If this Figure were doubled, having so many more, ordered in the same manner on the left Flanke it would be a compleat form to fire to the Front, Reer, and Flanks.

* For

‡ For the *direction*, looke back to the Chapter: which treats of his *doubling*. Onely remember to face the *Diviſion* that way which you intend they ſhall *give fire*.

‡ *The direction how to make this figure is in the 27. Chapter.*

For the manner of the *firing*, it is ordinary: the formoſt *Rank* of *Muſketiers* (on each part) having *fired*, they wheele off to the *right*, or to the *right* and *left*: (according as directions ſhall be given) placing themſelves in the *Reer* of their *owne diviſions*; the next *ranks*, in the meane time, moving forwards into their *leaders ground*; there in like manner *firing*, *wheeling off*, and placing themſelves as before: the reſt of the *ranks*, ſucceſſively doing the like. This *firing* may be continued at the pleaſure of the *Commander*. The *Pikemen* (as advantage may be given) in the *interim* either *petting*, *charging*, or ſending their fatall *ſhowres* amongſt the thickeſt of their *Enemies*. Laſtly, for *reducement*, *face* them all to their *front proper*, then *Command*, *halfe ranks* that *doubled*, to face to the *left*, and ſo to *march* into their *places*. For the further *directions*, turn back to the 27. Chap. which ſhewes the *Reducement* of the aforegoing *Figure*, &c.

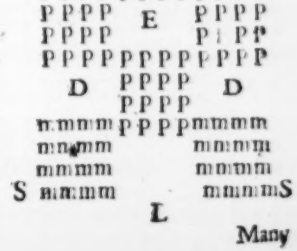
Reducement.

Chap 95. *Of the Sconce Battell.*

THe *Sconce Battell* is a *Figure* moſt properly fit for a whole *Regiment*; at leaſt, for a larger proportion of *number* then is here expreſt, it neither being good nor ſafe to divide a ſmall *Company*, into ſo many *Subdiviſions* and *Maniples*: yet to give ſatisfaction unto ſome, I have placed it here amongſt my *Figures*, and ſhewn the way how to make it with a private *Company*. For the manner or way how to *fire* upon it may be divers. The *Muſketiers* being ſo placed, that they may give fire to the *Front* and *Reer*, to the *right* and *left*, or to all *foure* together, at the diſcretion of the *Commander*. If your *Muſketiers* give fire, to the *Front* and *Reer*, (every Ranke making good his leaders ground) then the *Figure* will ſtill continue the ſame. If they *give fire* without *advancing* into their leaders ground, then the Muſketiers will Ranke even againe with their *Pikes*: and the *Figure* will become an *Hollow Croſſe*, the Muſketiers making the *Angles*. The words of *Comand* and *Direction*, which produce the *Figure* are as followeth.

For if it were made with a Regiment, Brigade, or larger body: it would require other words of direction, but be nothing more difficult.

The Sconce Battell.



Halfe Files of Muſketiers, face to the Reere. That being done, *Command all the Muſketiers to march to the Angles of their Pikes.* Next cauſe, *The two firſt and two laſt rankes of Pikes to ſtand. The reſt to face to the right and left; and march, untill they are cleere of the other Pikes, then ſtand.* Laſtly, command, *The two firſt and laſt Rankes of Pikes, which did not move, to double their Files to the right.* Theſe words of *Command* and *Direction* being *executed*, perfect the *Figure*, as followeth.

By subdividing and new placing some of the Divisions.

Many and severall are the *firings*, which (with some little alteration) may be drawne from this *Figure*. Nevertheless, not to spin out time with discourse, the *firing* now intended to be shewne, is to be performed to the *Front* and *Reer*. To which purpose, the one halfe (both of *Muskettiers* and *Pikes*) are to *face about to the right*; there *presenting* and *giving fire*: those of the *right flank* wheeling off to the *right*; the *left flank* to the *left*; and placing themselves in the *Reer* of their owne *divisions*. The next *Rank* still *moving forwards* into their *leaders ground*; the other *Ranks* successively doing the like. After this manner, the *firing* may be continued, and the *Figure* still preserved.

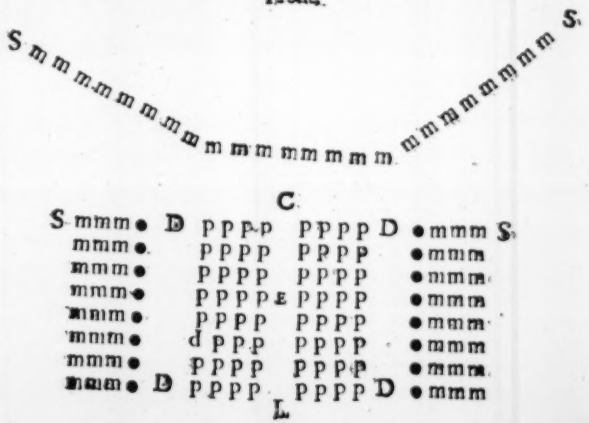
Reducement.

For *reducement*. First, *face* them all after their proper *file leaders*. Secondly, cause the *Front* and *Reer* divisions of *Pikes*, to double their *ranks* to the *left*. Thirdly, command the *Pikes* of the *Flanks* to *face* in opposition, close their *divisions* and then to face after their *leaders*. Next, command the *Muskettiers* of the *Front division* to face to the *Reer*. Lastly, command the *Muskettiers* (both of *Front* and *Reer* to) close their *divisions*. And then being *faced* to their *leader*, they are perfectly *reduced*, as at first.

Chap. 96. *Of firing by three files at once; two of them standing oblique, the other direct.*

The first making or direction to the figure.

WHen I began to treat of formes and *Figures* of *Battell*, I noted all *firings* to be either oblique or direct; and now for satisfaction to the curious, I shall insert two or three *oblique formes* amongst the rest. The first whereof shall be a *firing* to the *Front*, by drawing forth the outermost *File* on each *Flanke*, *obliquely* (or the *innermost*, as shall seeme best to the *Commander*) untill the *bringers up* of the *Files*, stand even with the *right* and *left* angle-men over the *Front* of *Pikes*. They may also lead a *File* of *Muskettiers* crosse the *Front* of *Pikes*; when having *placed* and *faced* them (as they ought) for execution, they will stand in manner of this following *Figure*.



The

The *two files* of *Muſkettiers* which were led forth, having *obliquely* preſented inwards, and the *File* drawn croſſe the *Front* of *Pikes*, being preſented direct *rank wiſe*: upon the firſt command they are all to give *fire* together, and then to face after their *bringers up* who led their *files* directly into their places. This done, they face to their proper *front* againe; the other *files* (in the meane time) leading forth after the ſame manner. Theſe having done their *execution*, are to returne into their *places*: being led off by their *bringers up*, (as is aforeſaid.) The reſt of the *files*, after the ſame manner, *firing* and returning untill they have all given *fire*, and then they will be all reduced as at firſt.

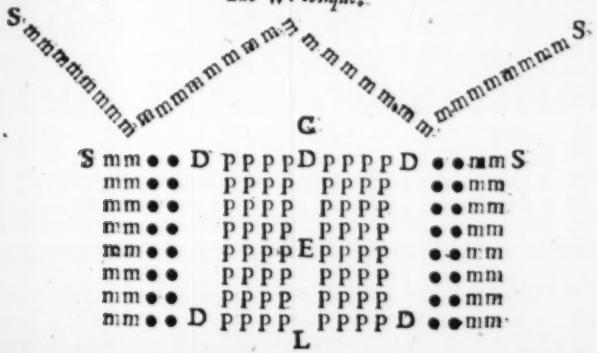
The way to give fire obliquely demonſtrated.

Chap. 97. *A firing oblique by four files together, in forme of a* W.

ALL the commendations that may be given of theſe *oblique figures*, is, that they *powre out a great deale of ſhot at once; and may quickly be reduced to their places*. Notwithſtanding, they are a great weakning to the *Body*, if any ſudden accident ſhould happen before they are ſetled in their former *ſtations*. Nevertheleſſe, I ſhall leave them to themſelves; and if they bee found to hold out weight, I ſhall not grudge that I have given them room amongſt the reſt. But if they prove too light, let them be as lightly reſpected, yet beare ſomewhat with them, for their *antiquity*. The way to make the *figure*, is as followeth. The *two innermoſt files* of *Muskettiers* on each *flank*, *march* forth (each of them being *led* by an *Officer*) untill they have taken their *places*. Then the *Officers* that *led* forth the *two middlemoſt files*, are to return to their *places* againe; the *Serjeants* that led forth the *outermoſt files*, ſtanding to ſee them doe their *execution*, Yet before the *Muskettiers* have order to *give fire*, obſerve the *manner* of their *ſtanding*, by the following *Figure*.

The direction to make the figure.

The W. oblique.



The *Muskettiers* having *preſented* according to their directions, they *give fire* all together; and then ſuddenly *facing* after their *bringers up*, *march* down into their places; the *next two files* of each *flank* in the *interim* of their *marching* away, are to *move* forwards to their *ground*; where they are in like manner to *give fire*, and then to take their places as aforeſaid. The reſt of the *files of Muskettiers* (if you have more) muſt then move forwards and doe the like: And in this ſort may the *Muskettiers* give fire once, twice, or *oftner* over: each *firing* being a *reducement* to it ſelfe.

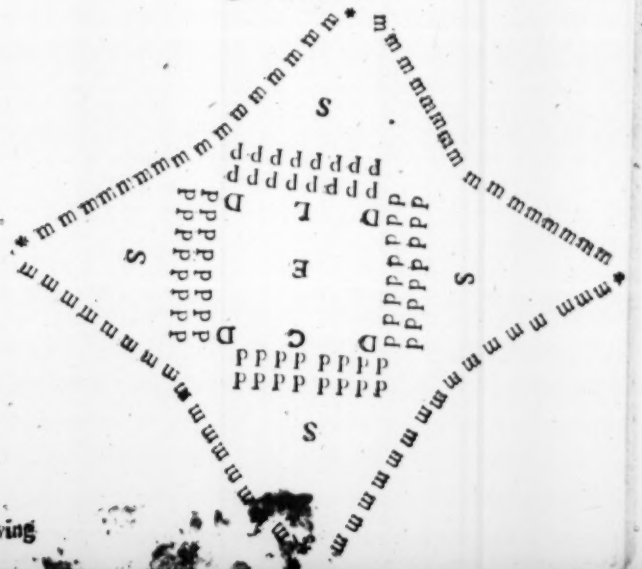
The direction taken from this Figure.

Chap. 98. *Of the Fort-battell; the way to make, and to reduce it.*

The uſe of the Fort Battell.

THe *Figure* of the *Fort battell*, is an *oblique firing*, and taketh it's *denomination* rather from the *ſimilitude*, then the ſtrength of a *Fort*. It's chiefe uſe is for the entertainment of ſome great *perſonage* or *Commander* in the *field*: who being received into the midſt of the diviſion of *Pikes*, the *Muſketiers* may preſent and give *fire* altogether in one *volley*. Or if they would have the *Muſkettiers give fire* one after another, then the *volleys* by *ſucceſſion* (which ſome call the Peale) will be beſt. If there be more *Muſkettiers* then will ſerve to make up the *Figure* ſingle, they may alſo give fire with the reſt, preſenting *obliquely* betweene the diſtance of their leaders. The way to make this *Figure* is as followeth. Firſt, draw forth the outmoſt *files* (of Muſkettiers) on each *ſlanke*, in forme of an *hollow wedge* before the Front of *Pikes*. Then cauſe the next two outmoſt *files* to face about, and to follow their bringers up, in the ſame form to the *Reer*. Then let the laſt two *files* of *Muſketteers* (on each *ſlank*) be drawne after their *file-leaders*, in the ſame manner and forme to the *ſlanks*. The *Muſkettiers* being thus ordered, and all preſented *obliquely* outwards, command the two firſt and two laſt *ranks* of *Pikes* to ſtand, the reſt of the *Pikes* to face to the *right* and *left*, and ſo to *march* untill they are cleere of the other *Pikes* which ſtand. Then command the *Pikes* which moved, to double their *files* to the *right*. Laſtly, command all the *pike-men* to face outward, each *diviſion* of *Pikes* after their *hollow wedge* of *Muſkettiers*. Or elſe let them face all inward to the *center*, and then the *Body* will ſtand in forme of the following *Figure*.

The Fort-battell.



Having

Having *fired* upon this *figure*, there is no manner of *wheeling off*: becauſe the *form* is ſtill to be continued. But when you come to *reduzement*, firſt *face* all the *Pikes* to their *proper Front*, that is, unto the *place* where you find the *proper file-leaders*. Secondly, let the *Pikes* which are *flankers*, *double* their *ranks* to the *left*, and ſo *cloſe* their *diviſions*: Then the *Pikes* will be *reduced*. For the *Muſketiers*; firſt *command* thoſe that are on the *flank* to *lead up* their *files* in their *due places*, cloſe to the *Pikes*: Next, *command* the *Muſketiers* of the *reer* to *ſleeve* up on each *flank* by *diviſion*; Laſtly *command* the *Muſketiers* before the *Front* of *Pikes*, to *face* after their *bringers up*, and to *march* down into their places; Laſtly, *facing* to their *leader*, they are all *reduced* as at *firſt*.

These firings are to be performed ſtanding the Muſketiers having given fire are to make ready again their places maintaining their figure.

** Reducement. Even and open Countries very dangerous for ſmall Bodies: where the enemy is ſuperiour in number, or horſe. The hazard of a Battell perilous.*

Chap. 99. *Of the croſſe Battell; how to make it with a private Company. The wayes to fire upon it, with other diſcourſes, concerning the neceſſities inforcing that Figure: with the meanes to make it more defenſive and ſerviceable: and laſtly, the way to reduce it.*

THe *croſſe Battell*, although it muſt needs ſhew *poore* and *thin*, *being* here *demonſtrated* by a *number* not *ſufficient* to expreſſe the *worth* of the *figure*: yet hath it paſt the *approbation*, both of *ancient* and *modern Commanders*. Who (with good *ſucceſſe*) have often *drawn out*, the *groſſe* of their *Battells*, into this *form*: and therewith both *ſuſtained*, and *rechanged* upon their *Enemies*. Each *diviſion* being very *aptly placed* to *relieve* the *other*. If the *Enemy* (bee like to) *give on in front*, then the *reer diviſion* may *ſub divide*, and *march up* by *each flank* making the *wings*. But if that part bee ſupplyed by the *Cavalry*: then they may ſerve to *line*, or *mixe*, *betwixt the Intervals*, and *diviſions* of the *horſe*; or be *otherwiſe diſpoſed of*, at the diſcretion of the *Commander*. Nevertheleſſe, if any object, that the *enemy* being in open *Campania*, may aſwell *charge* your *Battells*, in *flank* or *reer*, as in *Front*. The anſwer may be eaſily given; that the *Body* being *faced*, the matter doth ſtill continue the ſame.

If it be re-objected, that the *enemy* having the *advantage* in *number*, may ſeek *to diſtreſſe* you; by *charging on the ſeverall places at once*. To that may likewiſe be anſwered, that each *diviſion* may *readily face* to that part and *receive their charge*.

Notwithſtanding, diſcreet *Commanders* have ever been *cautious*, to *adventure* into the *even*, and *open Countries* (when the *enemy* hath the *advantage* of *horſe*; or much the *greater number* of *foot*) whereby they may be forced to the *hazard* of a *battell*: The which without *manifeſt neceſſities*, or (to the contrary) ſome *known* and *extraordinary* advantages; ought neither to be given, or *accepted*: So *nice* and *ticklish* is the *chance* of *warre*; where ſmall *errors*, oftentimes, are the *forerunners*, of great *overthrows*. But my intent is not, to *lavish forth* into theſe *lavish diſcourſes*, but *timely* to *make* my *retreit*, unto my *private Company*, and without further circumſtances of what hath, or may be done; come to ſhew, what I intend, concerning this *figure*: and ſhew the wayes, to *fire upon it*; the which are *ordinarily* two, &c.

The firſt placing of Muſkets. The ſecond way of placing the Muſkets.

The firſt, when the *Muſkettiers give fire*, and then place themſelves in the *reer* of their *own diviſions* of *Muſkets*. The ſecond way is, after that they have have *fired*, to *place them* in the *reer* of their *Pikes*: the *Pikes* maintaining the *Muſketiers ground*. The words of *Command* which produce the *Figure*, are as follower'h.

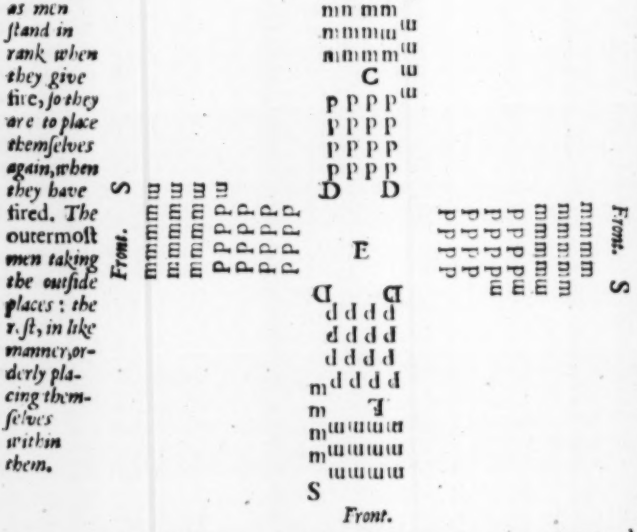
Two

The direction to make the Croſſe Battell with a private company, alſo

Two firſt ranks, wheel your Front into the midſt.
Two laſt ranks, wheel your rear into the midſt.
The reſt of the body, face to the right and left: and ſo march, untill the rear of the four diviſions make an even hollow ſquare.
Then let the Commander goe into the midſt, (or center) and face the whole company to him: giving them ſuch direction as is meet.
Luſtly, being all faced about to the right, the body will ſtand like the following Figure.

you may obſerve if that the Croſſe Battell were to be made with a Brigade, or Regement, then inſtead of wheeling two ranks, we ſhould perhaps wheel two or three Companies to either part, &c.

The Croſſe Battell.



Note that as men ſtand in rank when they give fire, ſo they are to place themſelves again, when they have fired. The outermoſt men taking the outſide places: the reſt, in like manner, orderly placing themſelves within them.

This *Croſſe-Battell* being *faced* to the *front*, *rear*, and *flanks*, and the *Muſketiers commanded* to *give fire*: one *way* of *placing* them is, in the *rear* of their *own diviſions* of *Muſketiers*; for that hereby, the *Muſquettiers* will ſtill continue their *places*. For the ſecond *way*, after that the *firſt ranks* have *goven fire*, let them *wheel off* to the *right*, (or to the *right* and *left*, if the number be *large*) and *place* themſelves in the *rear* of their *Pikes*, each *rank moving forwards*, and *maintaining* their *leaders ground*. The ſecond *rank* in like manner, is to *fire*, and to take their *places* after the *Muſquettiers*, which *fired* and wheeled off laſt before them. The reſt, ſucceſſively, are to doe the like, untill all the *ſhot have fired*, and are *wheeled* away: Then let the *Pikes charge*, &c. If any object, that it is *dangerous*, *to have ſo large diſtance between the Front of each firing*: I have already declared, that it muſt needs be occaſioned by ſome great extremity thrown upon us through *negligence*, or

When there is not above two or three ranks of Muſquettiers to give fire, the Pikes may port, when all the Muſquettiers are in the Rear of the Pikes, let them charge. It is very dangerous to fight, when our Souldiers are diſadvantaged by ſome known and evident diſadvantages.

neceſſity,

neſſity when wee ſhall bee *forced* to accept the *Battell* with ſo evident ſignes of *diſadvantage*; where the *enemy* may ſurround and *charge* upon us, in *front*, *reer*, and *flanks*. And therefore ſeeing that in ſuch caſes we are not alwaves afforded *means*, nor *time*, to *ſupply* all *defects*: we muſt bee content, according to the ſuddednesſe of the occaſion to make ſo good *defence*, as for the preſent we may conveniently *provide*. And in ſuch places, which lye moſt *open* to the *enemy* (where through defect of *number*, * the danger muſt needs bee *great*) there to place the *Waggons*, *Carts*, and other *carriages* ſo *commodiouſly*, that they may ſerve for a *Rampart*, or *defence* againſt either *Horſe* or *Foot*. Or if it may be found more *convenient*, to *impale* thoſe *places* (*leaſt defenſible*) with *ſharp Palliſadoes*; the which hath been a *weapon of ancient uſe*, *and now again lately practiſed*, *by the Gentlemen of the Military yard*; and I conceive may prove very *uſefull*, to *defend* the *void*, and *open ſpaces* which want other *defence*, from the *fury and inſolence* of the *haughty* and *over daring Horſe*. But if all theſe *helps* bee *wanting*, then three or foure *files* of each *arms*; may be *drawn croſſe*, from the *Angle* of one *front* to the *other*: the which being well *ordered*, may make reaſonable good *defence* on thoſe *parts*.

Having *given fire* upon the *Croſſe battell*, and brought your *Musquets* to the *reer* of the *Pikes*. If you would *reduce* them, *paſſe* into the *midſt* or *Center* of the *figure*, and *face* all (both *Musquettiers* and *Pikemen*) to you; and cauſe thoſe *diviſions* which were the *flankers*, to *cloſe to their order*. Next *wheel* the *fronts* into the *midſt* of the two other *diviſions*, one after the other: then goe to the firſt *front*, and *face* the whole *Body* to you, and ſo you ſhall have all your *Muskettiers* in the *midſt flanked* with *Pikes*. If you would *reduce* them into their right places, command the *Musquettiers* to *face* to the *right* and and *left outward*, the *Pikes* to *face* to the *right* and *left inward*: and ſo to *paſſe through*, and *incherange ground*, this being rightly performed, and the *Body* retaced to their firſt Front, they are reduced to their proper *Order*.

* *Palliſadoes uſed by the Perſian army of Xerxes againſt the Grecians at the battell of Machale, in Aſia, about 1800 years ſince, in modern ſervice by the King of Swede againſt the Poles; as alſo in the German Warre. Reducement.*

‡ *Such and ſo great lovers of Arms, as* Philopœmen *the* Achaian. Rawleigh *hiſt mund. Cap. 5 of the 5. Book of the firſt part.*

Chap. 100. *Of the hollow-fronted Croſſe Battell, how to make it with a private Company: and the way to fire upon it.*

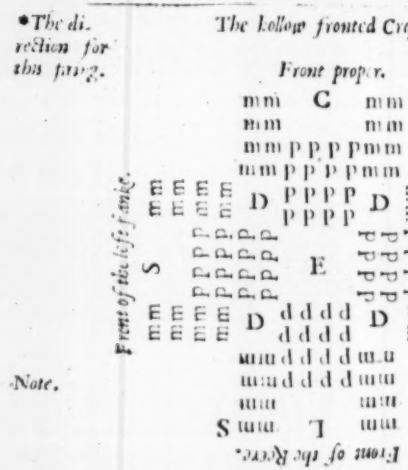
THis next *Figure* ſhall be of the *hollow fronted Croſſe*; which is a *ſtronger form* then that laſt ſhewn; and yet thus much let me warn you of, that there can be but little expectation of *ſtrength* to be perceived, in *battells* formed with ſo ſmall a *number*. This notwithſtanding, the ‡ ingenious *Martialiſts* can eaſily *diſcern*, thoſe things which in warre way prove moſt uſefull for their owne, and their Countries benefits; although they are here expreſſed to the publick view, in ſo *mean array*, and in ſuch *thin numbers*. Wherefore, ſetting aſide all Apologies and excuſes, I will briefly ſhew the words of *Command* and *Direction*, which will produce the following *Figure*

Two firſt ranks, wheel your front into the midſt,
Two laſt ranks, wheel your reer into the midſt.
The reſt, face to the right and left: and march untill they have made the perfect Croſſe.
Laſtly, cauſe the Muskettiers to flank their Pikes: according to this following figure.

The direction to make the hollow fronted Croſſe the files containing 8 men in depth.

*The direction for this firing.

The hollow fronted Croſſe.



* The ſeverall directions for *firing* upon this *Figure* may be divers, but to avoid *diſtraction*, I will ſhew onely one way; and that *directed* to the *front*, *reare*, and *flanks*. Nevertheleſſe (for varieties ſake) you may cauſe them to *give fire* once over, *wheeling off* by *diviſion*, and placing themſelves in the *reare* of their owne *diviſions*; ſtill *moving forwards* into their *leaders ground*, thereby to preſerve the *figure* in the ſame *order*.

Note.

At the ſecond time of *firing*, cauſe the *Pikes* to move *ſoftly up*, *even* with the *front* of *Muſketiers*: *porting* as they *advance forwards*. The *Muſkettiers* having *fired* and *wheeled off*, are to *place* themſelves in the *reare* of their diviſions of *Pikes* (whom before they flanked) every ranke of *Muſquettiers firing*, *wheeling off*, and *placing* themſelves as aforeſaid. Laſtly, the *Pikes* having *charged*, and againe *re-advanced*, the *Body* will ſtand in the *figure* of a perfect *Croſſe*.

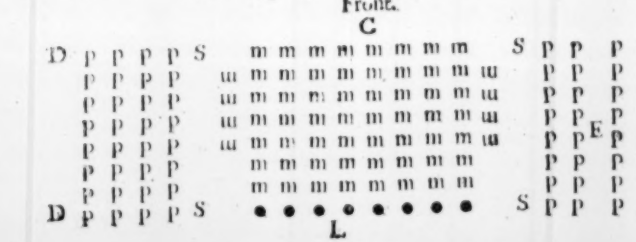
The reducement is the ſame with the croſſe battell.

For the *Reducement*, it is the ſame with the *Croſſe battell*, deli ered in the laſt Chapter. Wherefore I ſhall need to adde no further *directions* in this place, for the ſaid *Reducement*, then that the flanke *diviſions* are to be cloſed, and the *front* and *reare diviſions* to be *wheeled*: that the *Body* may be again returned into a *ſquare*, with the *Muſquettiers* in the middle. All this being here taught, I now proceed to ſhew one *firing* with the *Muſquettiers* in the midſt.

Chap. 101. *Of firing upon the ſquare Battell, flanked with Pikes.*

THe *Square battell* flanked with Pikes, muſt needs be very ſafe for the *Muſquettiers*, as being a very able *defence* for the flanks, againſt the incurſions of the *enemies horſe*. The *figure* followeth, demonſtrating the *Muſquettiers* in motion.

The ſquare Battell flanked with Pikes.



The

The waies of *firing* upon this *figure* are ordinarily three. The *firſt firing* is with the *aſpect* being directed to the *front*; the *Muſquettiers wheeling*, either all *off* to the *right*, or to the *right* and *left*, as you perceive by this *figure*. The *ſecond* is, for the *Muſquetters* to *give fire* to the *reere* upon a *march*; which they may eaſily doe from this *figure*. The *third* is, to *give fire* to the *front* and *reere*, upon a ſtand; the *halfe files* being *faced alone*. A fourth *firing* may be to the Flanks by *extraduction* if need be.

The ſeverall waies of firing from this ſquare Figure.

‡ If the *firing* be performed to the *front*, then every Ranke is to *march* up into their leaders *ground*.

‡ *Note the firing to the front.*

* If the *firing* be to the *reere* upon a *march*, then the Ranks (contrarywiſe) *cloſe* backwards towards the *reere*, to make good the *battell* on that part.

* *The firing to the reer.*

‡ If it be to the *front* and *reere* upon a *ſtand*, then the *Muſquetiers* march up into their *leaders ground*, and thoſe which have *fired* and are *wheeled off*, place themſelves in the *reere* of their owne *diviſions*.

‡ *The firing to the front and reere.*

To write further of this *firing*, were more then neceſſary, no one of theſe *firings* any waies altering the *figure*, but the *aſpect* only. Nevertheleſſe, if the *Commander* pleaſe, he may after the *firing* in *front*, *wheele both* Flanks *into the front*, and ſo *charge* Pikes; and from thence proceed to other *firings*.

Theſe two wheelings are to be underſtood for ſingle Companies and not for larger bodies.

If the *firing* were in the *reere*, he may *wheele the flanks into the reere*, and cauſe his Pikes to *charge* that way.

If the *firing* were to the *front* and *reere*, he may *wheele both flanks into the front and reere*, and ſo *charge with* his Pikes both waies. Which by Captaine *Bingham* is called *Amphiſtomus*.

If the *firing* were to *one* or *both Flanks* by *Extraduction*, then the Pikes *pore* all the time the *Muſkettiers are giving fire*, and after *charge* at diſcretion of the *Commander*: You may further obſerve, that if the *Horſe charge home*, then the *Pikemen muſt charge*, and the *Muſquetters* couch very low while they *move croſſe the front*, and give fire on their knees.

Before I come to *Reducement*, I ſhall proceed to the next *firing* in the enſuing Chapter.

Chap. 102. *Of the ancient manner of imbattelling the Plinthyum: the placing of each Armes, and the uſe of the Figure.*

THe *Plinthyum anciently uſed amongſt the Grecians, was ever four ſided (or four-fronted) battell. The middle part thereof being commonly hollow; on the outſides alwaies marched the heavy armed, the light and nimble armed ſlingers, darters, and archers being more ſecurely placed in the midſt.*

Notwithſtanding, it took denomination from the form, and not from *placing* of the *Armes*. (For example) *Eumenes* having ſent for his *Elephants* to their *wintering ſtations*; *Antigonus* thought to take them by *ſurpriſe*, and to that purpoſe ſent 2300 *Speare-men* and *Tarentines*, with all his *light armed foot*, who overtaking them upon the way, &c. The *Commanders* of the *Elephants*, ordered

Eudamus. The Elephants were ordered into a hollow ſquare, *by Eudamus their Commander. Sir* Walt. Rawleighs *Hiſt. ſaunds. lib. 4. c. 4 ſect. 4. as alſo in the Tacticks of Aelian, lib 2. the notes of the 42. Chap.*

the *Beaſts* into the *Plinthyum*, caſting all their *carriage* into the *midſt*. And indeed it was a *Figure* commonly taken up in times of neceſſity, when the *adverſe part* was much the abler in *Horſe*. And to that purpoſe was it framed by *Tymotheus the Athenian*, *Briſidas the Lecedemonian*, *Bardilis the Illirian*, and many others. Being uſefull and neceſſary, as well in time of *Battell* as in *march*, at both times for the *ſecurity* of the *Carriage* and the defence of the *ſick* and *wounded*. Much like unto this is our *hollow foure-fronted Battell*, which may well retaine the ſame name, although ſometimes differing in the *placing* of our *armes*. ‡ For if it ſhould ſo happen (as it often doth) that a charge be given in *Front*, *Reer*, and *Flanks*, at one and the ſame time; then I conceive this enſuing *Figure* very apt for defence, for that the *Muſquettiers* and *Pikes* are ſo placed, that each *armes* may be ayding and aſſiſting to the other. For ſeeing that neither * *Muſquettiers* nor *Pike-men* alone can be ſingly ſufficient of themſelves to withſtand the able and reſolute *Horſeman*, (without great *advantage of ground*) on the contrary, the *Muſquettiers* and *Pikes* being *conjoyned* into one *body*, and being well *ordered*, they are not onely able to *defend* themſelves againſt their *fury*, but alſo to put them to the *worſt*. Yet this muſt not be underſtood of raw and unskilfull *Souldiers*, whoſe ignorance is cauſe of diffidence, but of hardy, experienced, and well *exerciſed* men, ſuch as know well how to deme me themſel es couragiouſly in time of *fight*. The words of *Command* and *Direction* which produce the *Figure* are as followeth.

‡ *Plinthyum is a hollow foure-fronted battell having direct Angles.*

* *Vnleſſe the Muſquettiers ha l halfe Pik s, and know how to uſe them.*

Note that all the Muskettiers muſt be in the midſt, and the Pikes on flanks when you begin to make this Figure. If your Muskettiers be on the flank when you make it, then the croſſe will be Pikes, and the Angles Muskettiers, &c.

Halfe files of Pikes, face to the Reer, and march untill they are cleere of the laſt rank of Muskettiers.

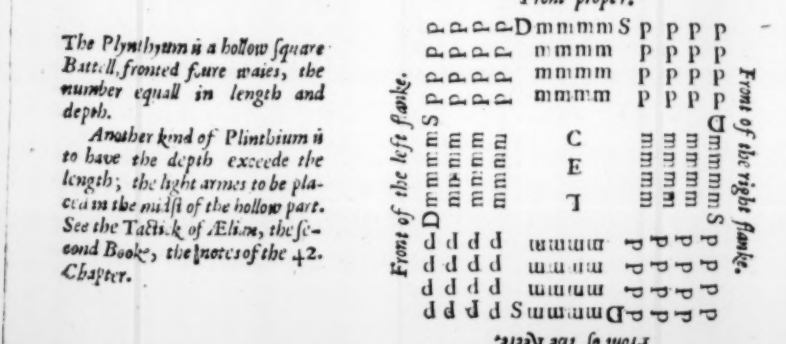
Secondly, command *halfe files of Muſquettiers, face to the right and left, (then) march betweene the diviſions of Pikes.*

Thirdly, command *left halfe-ranks, of the firſt diviſion of Muſquets, face to the reer, and march between the Reerdiviſions of Pikes.*

Laſtly, having *evened* their *ranks*, *ſtraitned* their *files*, *and cloſed* their *diviſions* to an *equall diſtance*, and being *rightly faced*; the *body* will ſtand like the following *figure*.

The Plinthyum or foure fronted Battell.

Front proper.



The Plynthyum is a hollow ſquare Battell, fronted foure waies, the number equall in length and depth.

Another kind of Plinthium is to have the depth exceede the length; the light armes to be placed in the midſt of the hollow part. See the Tactick of Ælian, the ſecond Booke, the notes of the 42. Chapter.

The

The manner of the *firing*: may be eaſily apprehended by the *figure*; the *Muſketiers giving fire* in *rank*, and *wheeling all off* to the *right*, do then paſſe down their *Intervals*, under the *favour* of their *Pikes*; placing themſelves in the *Reer* of their *own diviſions* of *Muſkettiers*; the *Pikes charging* at diſcretion. Having *fired once, twice*, or *oftner* over, and ſtill maintaining the ſame *ground*, the *Figure* will continue to be the ſame. *The direction for this firing.*

If the *Reer* part of the *battell* was by any means ſecured; ſo that you need *give fire* but *three wayes*, then the *Front-half-files* of *Musquettiers* might have been preſerved *intire*.

This *Plinthyum*, or *four fronted Battell*, may as well be made with the *Musquettiers* in the *Angles*: the *Pikes* making the *Croſſe*; this kind of *Command* alwayes making the *Creſſe* of the *Arms* in the *middſt* of the *Battell*.

After that you have *given fire* at diſcretion; upon this *figure* and *charged* your *Pikes*, if you would *reduce* them to the firſt *ſquare*, *command* the whole *Body* to *face* to the *Front proper*. *The reducement of the Plinthyum into the ſolid ſquare, flanked with Pikes.*

Secondly, *command* the *Musquettiers* in the *Reer* to *march up* on the *left* of the *Musquettiers* in *Front*: the *Pikes* being firſt *opened*, to give them *place*.

Thirdly, cauſe the *Musquettiers* in *flank*, to *face inward*: and to *cloſe* their *diviſions*.

Laſtly, cauſe the *Pikes* to *march up*; placing themſelves *right after* their *leaders*.

This being done, the *Body* will be brought againe into a *ſolid ſquare, flanked* with *Pikes*. If forbeare further to *reduce* them untill I ſhew the next *Figure* Yet, for further ſatisfaction to any that ſhall require it: *command* your *Musquettiers* to *face* to the *right* and *left outward*; the *Pikes*, to *face inward*; and ſo to *interchange ground*; and then being rightly *faced*, they are *reduced*. *The perfect reducement.*

Chap. 103. *Another hollow-ſquare for March.*

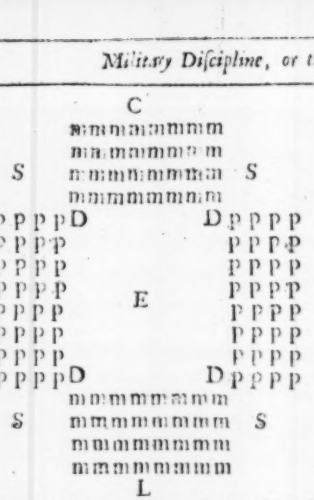
SVndry *forms* there be which goe under the *denomination* of the *hollow ſquare*. And very diverſly they may be framed. Some are *hollow, impalled* with *Pikes*; the *Pikes*, againe, *girdled* with *ſhot*: Other *ſquares* are made with *ſhot*, and they *impalled* with *Pikes*. Some againe with *diviſions* of *Musquettiers* and *Pikes*: orderly *mixt* with an *hollow* in the midſt. A fourth ſort is when each *Arms* are *divided* by themſelves: as when the *Pikes* make the *Front* and *Reer*, and the *Musquettiers* the *wing*. A fifth way is, when the *Musquettiers* lead in *Front* and *Reer*, and the *Pikes* make both the *flanks*. All theſe wayes are very neceſſary and uſefull; as the time, *occaſion*, or place ſhall give cauſe; or the judgement of the *Commander* ſhall ſee fitting. Nevertheleſſe, the *hollow battell* which I now intend to demonſtrate unto you, is eſpecially *uſefull* for a *march*: whereby to ſecure the *carriage*, as likewiſe to preſerve the *ſick* and *wounded*; it may alſo ſerve for the *Commander* to *conſult* with his Officers, or to make any *ſpeech* or *Oration* to the Souldiers. Or the *Enſigne* may inſigne of *triumph*, diſplay his *Colours* in the *midſt*: upon a *march* after *skirmiſh*. *As it now is the Cuſtome after Exercise.*

The way to make this *figure* (the *Musquettiers* being in the *midſt*) is as followeth. Firſt, to *command* the *Half files* of *Musketiers*, *to face to the Reer*.

Then Command all the *Musquettiers to march, and the Pikes to ſtand*.

When then are *clear* of the *Front* and *Reer* of the *Pikes*, let them ſtand, and *face* all to the *Front proper*; and it produceth this following *Figure*.

The direction to this firing.



If the *firing* be onely intended to the *Front*: then *command* the *Musquettiers* of the *Reer-division*, to *open* to the *Right* and *Left*, and to *sleeve up* on the *outside* of the *Pikes*, there *presenting* and *firing* at the same instant, with the *Musquettiers* of the *Van*: each part *wheeling off*, and *placing* themselves in the *Reer* of their owne *divisions*. This *firing* doth conceive the *Reer* to be by some means *secured*. But if you presuppose a *charge* to be *given* to the *Front*, and *reer* marching. It may be *retaliated* (or acquitted) still continuing the *march*. Ne ertheleſſe the inſolence of the *Enemy* will ſcarce be *repelled*, or *abated*; without an *Alt* and *facing about* of the *Reer-half-files*. The which being *performed*, the *Muſquettiers* are to *preſent* and *give fire*; *wheeling off* by *diviſion*, and *placing* themſelves in the *Reer* of their own *diviſions* of *Musketteers*, each *rank moving forward* into their *leaders ground*, and doing the like. If you ſhould *give fire*, and not *move forwards* into your *leaders ground*: then the *Musquettiers* would *fill* the *hollow* in the *midſt* between the *Pikes*. Ne ertheleſſe, ſuppoſe the *Figure* ſtill to continue to be the ſame. Becauſe I will now come to the *Reducement*: and the rather, for that I have not done it ſince I began with the *Hollow fronted Croſſe*. But now (ſo pleaſe you) I will *reduce* all by a *firing*. And to that end, firſt *cloſe* your *diviſions* of *Pikes*; and then the *Musquettiers* will be all in the *Front* and *Reer*.

The reducement by a firing the which is not expreſt in figure in this place: it is in cap. 88.

Secondly, cauſe the *half files* (both *Musquettiers* and *Pikes*) to *face* to the *Reer*. Then cauſe the *Musquettiers* (both of *Front* and *Reer*) to *give fire*, *wheeling off* by *diviſion*, and *flanking* their *Pikes*. When they have *fired* all over, the *Pikes* may *charge*: who being again *advanced*, and all *faced* to the *Front proper*, they are all *reduced* (as at firſt) into the *ordinary Square*, *flanked with Muſquets*.

Chap. 104. *Of the hearſe Battell, and of the hollow hearſe, and Croſſe.*

Tactick. cap. 30. The uſe of the hearſe.

THe *Hearſe Battell*, by the *Greeks* called *Orthophalanx*, (as in *Elian*) *Is when the depth, doth manifold exceed the length thrice at the leaſt. As when our Companies march forth by right inductions* (or in *ſucceſſive diviſions*.) It is a *figure* eſpecially uſefull for *march*, becauſe that upon thoſe occaſions, a *Body drawn out* in *length* would meet with many *lets* and *impediments*: by reaſon of the variety of *grounds*, and other *accidents*, the which they muſt comply withall in their way, Sometimes incountring with *woods* and *buſhes*, ſometimes with *hils*, and *ſtraights*, ſometimes with *rivers*, *bridges*, *ditches*, *pits*, *quackmires*, and many other the like inconveniences: which would quite break the *order*, and array of any other *figure*, having the *length* more *extended*. This *form* is alſo held the beſt for

If it were not for theſe impediments: it were better to march in

form of Battell; with the front and wings extended at length,

march

march in the *night*; becauſe the *range* (or *breaſt*) not being *long*, the *order* may be the better *preſerved*, and the *march performed* with more ſilence. But of all other, it is the *weakeſt*, *bringing but few hands to fight*: and hath ſeldome or never been *uſed* by any good *Commander*, unleſſe it were upon neceſſity. It may be made either *ſollid* or *hollow*, and being conjoyned to the *creſſe*, may prove more *ſerviceable*, eſpecially, for the ſecurity of the *carriage*.

The hearſe battell of all other the weakeſt for fight.

True it is, that were the *form* farre more *ſtrong*, yet being demonſtrated, by ſo ſmall a *number*, might well *render* it ſuſpected: ſeeing the worth thereof (by reaſon of the *thinneſſe*) could not ſo evidently appeare, as otherwiſe it would, were the *number large*.

But I have onely taken upon me to ſhew the *ſeverall forms* and *Figures* of *Battell*, which may be *formed* and *practiſed* by a *private Company*: as having *limited* my ſelf, not to *exceed* the number of one hundred twenty eight men. Wherefore my requeſt muſt be that the *courteous Reader* when he ſhall find that any *figure* for want of *number* looks *thinne*, (or poore) hee will there bee pleaſed to *cloathe* it in a larger *number*: for that thereby the *Battell* will appeare the more *ſollid*, and the *beholder* become the better *ſatisfied*.

This *figure* may in like manner be *uſefull* for a *Convoy*: the *hollow parts* thereof, being very *commodious* to *ſecure* the *carriage*: the men alſo are very well *diſpoſed* to *help* and *aſſiſt* each other, in whatſoever part it ſhould happen them to be *aſſailed*.

This figure fit for a Convoy.

The words of *Command* and *Direction* which produce the *figure*, are as follow.

The direction to make this figure with a private Company.

Wheel Front and Reer into the left Flank.

That done, *face* them as before, and the *Muſkettiers* will be in *front*, *midſt*, and *reer*.

Next, *open* the *Muſkettiers* in the *midſt*, to the *right* and *left*, and cauſe them the to *double* their *ranks* to the *left*.

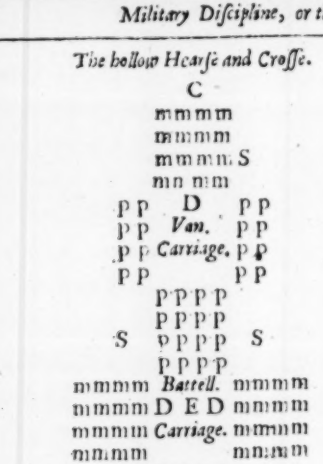
Then cauſe the *Front-halfe-files* of the *Front diviſion* of *Pikes* to *open* to the *right* and *left*: and the *Reer-halfe-files* of the *Reer diviſion* of *Pikes* to doe the like.

Then, having *evened* their *ranks*; and *ſtraightned* their *files*, and being *faced* to their *leader*, the *Body* will ſtand in *form*, like this inſuing *figure*.

The

* *The direction to this firing.*

The hollow Hearſe and Croſſe.



* It ſo be, you will *give fire* upon this *Figure*, you may do it *any way*, or *every way*. If you *give fire* to the *front*, *reer*, and *flanks*, then let your *Muſquettiers wheel* all *off* to the *right*, and *place* themſelves in the *reer* of their *own diviſions*. If you would ſtill preſerve the *Figure*, then let every *ranke* (before they give fire) *march up* into their *leaders ground*.

Having either *marched* or *skirmiſhed* in this *form*; before I come to the *Reducement*, I will *draw* one other *figure* from it, the which I conceive with *ſome ſmall addition* would prove very *ſerviceable*, even for a *pitche field*, were the *number proportionable*.

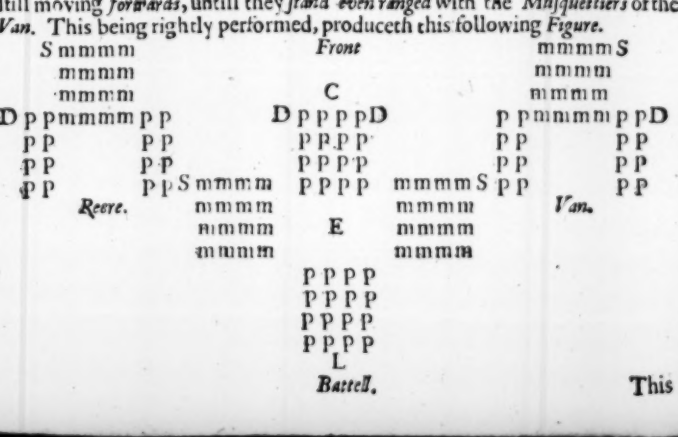
* *The direction to make the inſuing figure.*

* The *Directions* to make this *Figure* are as followeth.

Firſt, *command the Van to make Alt.*

Secondly, *command the Croſſe* (being the Battell) *to ſleeve up on the left.*

Thirdly, *command the Reer to ſleeve up to the left of the battell.* The *Muſquettiers* of the *Reere*, ſtill moving *forwards*, untill they *ſtand even ranged* with the *Muſquettiers* of the *Van*. This being rightly performed, produceth this following *Figure*.



This

This *Figure* although here demonſtrated by the number of a ‡ ſingle *Company*, yet carryeth the port of a *Regiment*. Borrowing the denominations of *Van*, *Battell* and *Reer*; and may at direction of the *Captaine* (or other *Commander*) be ſo ordered, and the *firing* performed accordingly. The *Van* and *Reer* making the *Wings*, may ſend forth ‡ looſe *files* to begin the *Skirmiſh*. Secondly, they * may *give fire even a breaſt*. Thirdly, the *battell* ſlowly advancing, may *give fire* at diſcretion. Upon all theſe *firings*, the *Muſquettiers* are to *wheel off* to the *right*, or to the *right* and *left*, taking their places according as direction ſhall be given. Laſtly, to come to ‡ the *Reducement*. Firſt, *march forth the Van*, the *battell* and the *Reer* falling ſucceſſively into their ‡ places. Secondly, command the *Pikes* of the *Van* and *Reer* to face inwards and cloſe their *diviſions*; this being performed, cauſe the *Muſquettiers* of the *Battell* to double the *files* to their *right*, and in like manner to *face* and *cloſe their diviſions*. Laſtly, *wheele Front and Reer* into the *right Flanke*; which being done, and the whole body againe faced to the *front proper*, all will be *reduced* as at the firſt.

‡ *This figure eſpecially proper to a Regiment.*

‡ *Note in Chap. 72. the directions of firings by ſeverall files.*

* *The looſe diſmarked files, being ſo commanded, the wings begins to give fire even a breaſt.* ‡ *The reducement.* ‡ *Making againe the hollow hearſe and croſſe.*

Chap. 105. *Of the Hollow Square girdled with ſhot.*

THe *Hollow Square* girdled with *ſhot*, is a Figure to be uſed in times of neceſſity, when as the Commander well foreſeeing he ſhall be inforced to *fight* (with diſproportion of number) he therefore wiſely and timely takes the benefit of ſome ‡ advantagious ground, thereon ſpeedily drawing forth and imbatteling his *Army* into this forme. And that nothing may be wanting, or through neglect expoſed to danger, the which by any meanes may be ſecured; all the *carriage* (which otherwiſe would not prove ſerviceable and available for the better ſtrengthning and fortifying ſome part or other of the *Battell*) ſhould be ſafely placed in the midſt. And leaſt the adverſe part taking advantage to break in at any the ſpaces between the *Angles*, ſhould thereby breed confuſion, or break their array; they are ſuddenly to impale thoſe parts which offer themſelves as weakeſt (and leaſt defenſible) with ſharp pointed *Palliſadoſe*. * A weapon, which hath ſometimes bin uſed by our *Engliſh* Bow-men, with good ſucceſſe againſt the *French*: and now of late in our owne time, by that worthy *Hero*, and Prince of matchleſſe memory, *Guſtavus Adolphus*, King of *Sweden*, in his warres of *Pole*, and *Germany*, joyning the Swines-feather with the Musker, as a reaſonable defence againſt the incurſions of the Horſe. The uſe of which weapon is now practiſed and taught here amongſt us: by that worthy Gentleman, and expert Souldier, Captain *Henry Tilher*.

‡ *Vantgrounds, rough, buſhie, and hilly grounds, are all leſs and unpedimants to the horſe.*

* *At Algier. Coaſt. Palliſadoſe have likewiſe been uſed of late in the Italian-warrs by the name of Swines-feathers.*

* But to return: thoſe parts which lye moſt open to the fury of the enemies Horſe, ought to be impaled with *Palliſadoſe* (or *Swines-feathers*, as aforeſaid: or if thoſe kind of weapons be wanting, then ſupply that defect, by ſpeedy caſting up a rampart or breaſt-work of earth, in each needfull place. Nevertheleſſe if time permit not, or that the ground be not feaſable, then the *Wagons*, *Carts*, and

* *The Muſquettiers well experienced in the uſe of the half-pike, either in ſtraight, or Compania will be too hard for the horſe.*

other *Carriages*, may bee ſo orderly placed, that of themſelves they may bee ſufficient, to fortify and defend thoſe places, which otherwiſe would lye too open to the invaſion of the *Cavalry*.

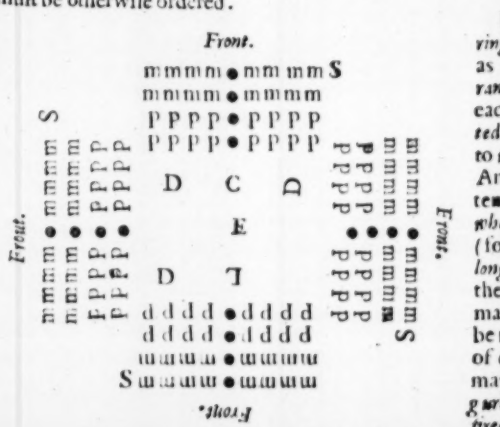
This *Figure*, may be as well made with the *Pikes* foremoſt: but becauſe that the *Muſketiers* may more commodiouſly *fight* before their *Pikes*, and with *l'eſs danger* to their own *body*: therefore I conceive it fitteſt, at firſt to place them in front of their *Pikes*. And if the *enemy* ſhall too *hotly preſſe* them with his *Horſe*; then, at the diſcretion of the *Commander*, they may ſafely *retreat behind their Pikes*; the *Pikemen making good* the *ground* of the *Muſketiers*. For better inſtaction, obſerve the *direction* to make the following *Figure*. Firſt, *command a Sergeant to draw forth* all the (k) *odde files* of the *right flank*, (both *Muſketiers* and *Pikes*) and *wheel* them to the *left*, *croſſe* the *front*. That being done, *command* the *odde files* of the *left flank*, (as well *Muſketiers* as *Pikes*) to *face* to the *Reer*, and let them in like manner be *wheeled* to the *left*, *croſſe* the *Reer*, following their *Bringers up*.

k. Note that the *odde files* on the *right flank* are the *outermoſt file* to the *right*, the third *file*, the fifth *file*, the ſeventh, and ſo forward (for the reſt, if the *Body* be larger) beginning your account from the *outermoſt file*, to the *right*. Note, that the *odde files* on the *left flank*, are the *left hand file*: the third, the fifth, the ſeventh, &c. ſo ſtill accounting the *odde files*, beginning with the *outermoſt file* to the *left*. Theſe directions are for a private Company: a Regiment or larger body muſt be otherwiſe ordered.

For the reſt of the *body*, that remaines *undrawn forth*: let them *cloſe* to the *right* and *left outward*; untill the *Reer-Angles* of each *diviſion*, ſtand *diagonally oppoſite* to each other. Then, let them be all *commanded* to *face* to the *Center* or *midſt* of the *hollow ſquare*; where the *Commander* is to give them ſuch *incouragement* and *directions*, as ſhall be meet.

Laſtly, Let all *face* about to the *right*, and *preſent*.

Direction to the firing.



For the manner of *firing* upon this *Figure*, it is as followeth. The *firſt rank* of *Muſketiers* (to each *front*) having *preſented* and *given fire*, they are to *wheel* all *off* to the *right*. And becauſe that eight or ten men, are too *many* to *wheel down* one *Intervalle*, (for that they will bee ſo *long*, before they can *clear* the *front*) therefore you may cauſe *Intervalles* to be made, *between* the *midſt* of each *diviſion*, as you may perceive in the *Figure*. The *firſt rank* having *fired*, and *wheeled off*, the *next ranks* are to *move forwards* into their *ground*: they which *wheeled off*, in the mean

mean time *placing* themſelves in the *Reer* of their *own diviſions* of *Muſkettiers*. The *next rank* of *Muſkettiers* having *fired* in like manner, are to *wheel off*, and to place themſelves, as aforeſaid: the * *reſt of the ranks* of *Muſkettiers*, ſucceſſively are to doe the like, untill they have all *given fire*, (once or other over) that way, according to the occaſion. And in this *interim* may the * *Bow-pikemen* be bountifull in beſtowing their *ſhowers* of *arrowes*, amongſt the thickeſt of their *enemies*.

If the *horſe* prevaile ſo much, that the *Muſkettiers* may not endure to beare the *brunt* of them: * then let the *Muſkettiers* after they have *fired*, *wheel off*, and place themſelves in the *Reer* of their following *diviſions* of *Pikes*: they *moving forwards*, and *maintaining* the *Muſquettiers ground*; charging with their *Pikes* (as they ſee occaſion) for *ſecuring* the *Muſquetiers* in the *midſt*. This no withſtanding, if the *enemies horſe* ſhall ſtill *preſſe forwards*; and with their *ſhot* ſhall continue to *annoy the body* (the *Pikes* on this *figure* being eſpecially *defenſive*;) then cauſe the *Pikemen* to *charge* at the *foot*, and your *Muſquettiers*, to give *fire* o er them: according to former *directions*, on the *Convex-half-moon*. After this manner, the *Battell* may be continued to the *laſt rank*. When you have given *fire* in this order, your *Muſquettiers* being all in the *Reer* of your *Pikes*; and if you be minded to *reduce* them into the *juſt orderly ſquare*, this is one way for it, *Paſſe through* your *Muſquetiers* before your *Front o pikes*, as they were before the *firing*: that being done, le the *Commander face* the *whole body* to the *left Angle*, or the *front aw ſion*, by which meanes he ſhall there find the *half* o his *file-leaders*. This being performed let them *march*: and ſo *even* their *ranks* and *ſtraiten* their *fil s*; the *Reer diviſion* of *Muſquettiers* and *pikes*, orderly following after the *front diviſion* of the like *Arms*. After this, let the *half-files* which then are (which indeed are the r *filue* of the *file-leaders*) *double* their *ranks forwards* to t e *left*: which being performed, the *men* are *reduced* as at firſt.

If you would *reduce* them ſome other way, without *paſſing through* your *Muſkettiers* as I have formerly ſaid) then firſt let the *whole body face* to the *left Angle* of the *front diviſion*; and *march evening* their *ranks* and *files*, as aforeſaid. Which being done, cauſe the *half-files* (which then are) to *double* their *front* to the *left*; which being in like manner performed, all your *Muſquettiers* are ſtill in the *midſt*. Your next work, is, to cauſe your *Muſquettiers* to *face* to the *right and left outward*: and your *Pikes*, contrariwiſe, to *face inward*, and ſo to *paſſe through*, and *interchange ground*. Thus being *faced* to their *front proper*, they will be *reduced*, as at firſt.

If any will be *practiſing* of this *form* of *battell*, with a *ſmaller number* of *men* (as with 64. or *fewer*) whereby they will be conſtrained to *double* their *half-files*: then they will bee *reduced* the ſame way: onely they ſhall not need to *double* their *half files* againe, in their *reducements*: as they muſt needs doe, were the *number larger*.

* *If there be more ranks of Muſquettiers then is here preſented in this figure.*

* *The Bow-pikemen (if at any time uſefull) have in this Figure good means to employ their dexterity.*

* *A ſecond way of placing the Muſquettiers.*

A third way of firing on this Figure.

The reducement.

A ſecond way of reducement.

Chap. 106. *Of the Sollid Square, with Muſquettiers in Center and Angles. The way to make the Figure with a private Company: how to fire upon it, and to reduce it.*

INfinite are the *forms* and *figures* of *Battell*, which may be made; yet all *differing*, either in *circumſtance* or *matter*. Some of them are *Sollid*, others *Hollow*: ſome of them, being *Trines*, *Squares*, *Hearſes*, *Cirtes*, *Creſſents*, *Croſſes*, *Diamonds*,

Diamonds, *Plinthiums*, *Pleſiums*, *Parameſes*, and *infinite* others. Some of them taking their *denomination* from the *nature* of their *numbers*. Others according to the *placing* of each *Arms*. A *third* ſort, taking their *names* from things they moſt reſemble, all of them being neceſſary to bee knowne, to ſuch which would bee accounted skilfull * *Serjeant Majors*: that ſo with all *numbers*, upon all *occaſions*, they may readily bring their *Souldiers* into any *form* or *figure* of battell (according as the *time*, the *number*, and *place* will give them leave) for *oppoſition* either of *Horſe* or *foot*, or of both conjoyned.

* Majors *ought to be of ſingular skill and experience, that ſo they may at all times be able (having obſerved the ſituation and place) to draw their men into forms moſt advantagious to them ſelves, and offenſive to their enemies.*

Excellent was the cuſtome of that worthy *Philopœmen* the *Achæan*, who when he walked or travelled abroad with his friends and familiars, would *mark and peruſe the ſituation of the Countrey about him*: and ſo contrive and diſcourſe to his companions, that if it ſo happened an *Army* to *march* that way: Then hee ſuppoſing to have under his * *command* ſuch a *number of Souldiers, ordered and appointed* in ſuch a *manner*, and *marching towards ſuch a place*; where being upon ſuch *a ground encountred*, by the *greater* and *better prepared Army*: Then would he put the queſtion; whether it were fit for him to *hold on his way, retire*, or *make an halt*: what *piece of ground* were meereſt for him *to ſeize on*, and in what *manner beſt to doe* it; in *what form to order his men*, and how and in what *numbers to place each Arms*; where to *beſtow his carriage*, and *under what guard to leave them*. Next would he propound, if that the *enemy* were for the preſent *beat off*, then how with the *moſt conveniency to encamp that night*, *which way*, and in *what manner* were his *beſt to march the next day*: by theſe and ſuch like continuall diſcourſes and meditations, he was grown ſo *exact* and *perfect*, that he never met with any difficulty, whence he could not explicate himſelfe and followers.

* This kind of practiſe and meditation, an excellent means to make men expert in this Military trade.

Now after ſo large a digreſſion, return wee back to our *ſingle Company*; the work of this *Chapter*, being to ſhew the *Pleſium* or *long ſquare*. In which the *Muſquettiers* are *half* in the *midſt* of the *Pikes*; and the other *half equally divided*, and *placed* on the *foure Angles* of the *battell*: the *pikes* making *foure diviſions*; as being *placed* upon the *Front*, *Reer*, and *Flanks*. But not to hold you with longer *circumſtance*, take theſe *words* of *command* and direction, which produce the following *Figure*.

The Command is, *Foure middle-moſt ranks, of Muſquettiers and Pikes, interchange ground.*

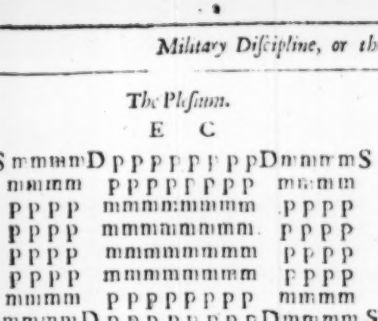
For further direction; cauſe the *foure middle-ranks of Muſquettiers* to *face to the right and left inward.*

That done, cauſe the *foure middle-ranks of pikes* to *face to the right and left outward*, then let them *move and interchange their places.* This done, and *faced* to the *firſt front* produceth the inſuing Figure.

The

The Pleſium.

E C



L

If you would *give fire* upon this *Figure*, it may be performed either to the *Front* and *Reer* to the *right* and *left*, or to *all foure* together. But which way ſoever the *firing* bee, let the *Aſpect* of the *Muſkettiers* in the *midſt* be turned the ſame way, and cauſe the *Pikes* which ſtand *before* them, to *charge* at the *foot*, and the * *Muſkettiers* in the *Center*, to *give fire* over them. The *firſt rank* having *fired*, let them kneel (or *crouch* low) upon the ground; making *ready* againe: whilſt the next *ranks* behind them, *give fire*, and doe the like: and ſo forwards, for the *reſt*. Having all *fired once over*, this way, let them riſe up: and (if need be) *give fire over* againe, after the ſame manner. The *Muſkettiers* on the *Angles* (in the *interim*) *giving fire* after the ordinary way, *wheeling off*, and falling in the *reer* of the *Muskettiers* of their *own diviſions*; the others in the mean time *moving forwards*, and making *good* their *leaders ground*. This being done, and the *Pikes* having *charged*; the *Figure* will ſtill continue to be the ſame, without alteration. And that as well in *men* as *matter*: if ſo be the *firing* be performed, according to the former *direction*, either in the Book or Margin.

* *The Muſquettiers in the midſt of the Battell, may give fire by extradition, which will be a better way, then to give fire over the Pikemens heads.*

For Reducement, command the *foure middlemoſt ranks of Muskettiers and Pikes to interchange ground*; and they will be *reduced* as at the firſt. Reducement.

If this be not plain enough, obſerve theſe following directions. *Muskettiers of the middle diviſion face to the right and left outward: Pikes of the flank diviſions face to the right and left inwards*; this done, let them *move into each other places*, and *face to the front proper*, and they are rightly *reduced*.

Chap. 107. *Of the double croſſe Battell and ſeverall other forms from thence proceeding.*

I Shall now proceed to ſhew ſome *forms*, for the *Imbatteling* of larger numbers. It being one of the moſt principall parts of the *Art Military*; to *Arrange* your Battels into ſuch forms as may bring moſt *hands to fight* with conveniency: ſo that one part of your Battell doe not *cumber* or *hinder* the other. But by their orderly placing they may be *aiding* and *aſſiſting* to each other. Appointing to every part, *maniple*, or *diviſion*, their due number: what order they are to keep, *when*, and *how* they ſhall *fall on*, that ſo there may be no diſturbance in the time of *fight*. Therefore in the *ordering* of your *Battels*, you ought to be carefull of what may happen by *caſualty* or *chance* of *fortune*: that ſo by a timely foreſight you may provide *remedies*.

Eſpecially take notice, that you alwayes have *reſerves* ready, both of *horſe* and *foot*, (if you have them in the field) that ſo by their *timely aſſiſtance*, the broken and diſtreſſed parts of the Battell may be upheld and relieved.

* Witnes *Cæſars* receive at the Battell of *Pharſalia* and infinite others ſince. And indeed no good Commander, drawing forth his Battalions, into what forme ſoever: But he will alſo provide, and place convenient reſerves, both of horſe and foot.

* For many times it ſo happeneth that ſuch a *reſerve* may bee an eſpeciall cauſe to gaine a *victory*; the want thereof (to the contrary) may be a means *to hazard the loſſe of all*. Of this you may read *examples* enough in all *Hiſtories*, both *Ancient* and *Modern*. But I forbeare to wade further into theſe diſcourſes, and therefore return to the work of the Chapter.

Some Commanders have *Ranged* their *Armies* into one only *Battell* without either *wing* or *reſerve*: ſome in to two, others into three, ſome into foure, ſome into five, ſome ſix, ſeven, eight, nine, and ſome into more. Now although that this ſmall number that I have pitched on be no ſufficient to demonſtrate the *Figures* ſo perfectly (when they are divided into many parts) as larger numbers would make them appeare; yet accept of them as they be. For I have purpoſely choſen ſo ſmall a number: that ſuch *Captains and Generalls as pleaſe, may make uſe of them in their practice*. The *Command, Direction*, and *Figure*, followeth.

The Command is, *Muſketiers march (untill your half files range even with the front of Pikes, then ſtand.*

Half files (of each Arms) face outward, and march (untill you are cleare of the Angles of your own Arms, then) ſtand: face all to your leader.

If this firing were to the front and reer, then the two laſt diviſions of Pikes may be Muſketiers, the Pikes placed even with the Reer-Angles of the

Muskettiers in the Front.

This Figure fit to fire to the front and both flanks.

Your *Body* being drawne into this forme; it ſtands aptly for *firings* in *front*, but may very fitly ſerve for to give fire to the *front* and both *flanks*. If you would fire to the *front* and preſerve your *Figure*; then the *Muſquettiers* muſt move forwards into their leaders ground. * If you pleaſe you may move forwards your *reer diviſions* of *Muſquettiers*, and make wings of them to begin the *Skirmiſh*; having fired once or twice over, they may *retreat* into their places, and then the *front diviſions* may entertaine the *Skirmiſh*, and fire two or three times over. The *Reer diviſions* may alſo give fire with them at diſcretion of the Commander. The *Pikes* in the meane time are to *advance*, move forwards, *poſt, charge, ſtand, retreat*, all according to the *direction* of their command, or *beat* of the *Drum*.

** Skirmiſh in Front with wings.*

If

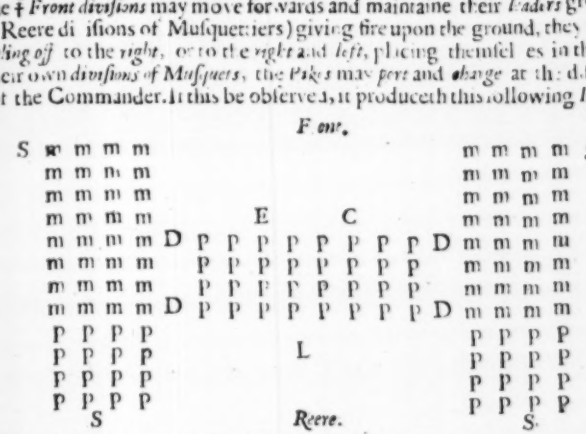
If you would give fire to the *front* and both *flanks* at one and the ſame time, then the *front diviſions* both of *Muſquettiers* and *Pikes* keepe their *Aſpects* and give fire to the *front*. The * *Reer diviſions*, as well *Muſquettiers* as *Pikes*, *face to the right and left*, firing to the *flanks*. If they give fire moving forwards into their *leaders ground*, then they continue the *Figure*. And if the Commander think fit the † *Front diviſions* may move forwards and maintaine their *leaders* ground, (the Reere di iſions of Muſquettiers) giving fire upon the ground, they ſtand, *wheeling off* to the *right*, or to the *right* and *left*, placing themſelves in the *reer* of their own *diviſions of Muſquets*, the *Pikes* may *port* and *charge* at the diſcretion of the Commander. If this be obſerved, it produceth this following *Figure*.

Direction for the firing, to the front and flanks.

* *Reer diviſions are the halfe file leaders*

† *This firing alering the place of the Muſkettiers in flank varieth the former form to this inſuing figure.*

Front.



If you will give fire on this *Figure*, it is to the *Front*, having fired once or twice over, the *front diviſion* of Pikes may move forwards, *porting* untill they *ranke* even with the *front* of the Muskettiers, and there charge their *Pikes*, the Muskettiers ſtill continue their firing. The Reere diviſions of Pikes in the meane time facing to the *right* and *left* outward, and fleeving upon the *flanks* of the *reer* diviſion of Musketiers; there in like manner *charging* their Pikes, either to the *front* or *flanks* according to direction, which produceth this following *Figure*.

A ſecond way to make this figure.

If you would make this *figure* from the *Square* (of Pikes flanked with Muſkettiers, it is no more but) Command, *halfe files of* Pikes, *face to the right and left outward, and paſſe through to the flanks of your* Muskettiers, (*then*) *ſtand*, and *face to your leader*.

Front.

I cannot

I cannot ſtand to inlarge my ſelfe upon every *figure*, to ſhew the ſeverall *ſwings* that may be produced for them; let it now ſuffice that I demonſtrate the *figure*, and give directions how to *make* and *reduce* them, any ingenious Reader that hath well peruſed my Booke, muſt needs (by this time) be able to conceive the ſeverall *waves* and *ſwings*, that each *figure* may produce almoſt at firſt ſight. And therefore I will ſpare the paines, and come to the *reducement* of this *figure*, leſt the Chapter prove too long. Having *given fire* upon this *figure*, either to the *Front* or *Reer*, or to both together, and the whole *body* againe *faced* to the *proper front*. Commend the outmoſt *diviſions* of *Pikes* to *face to the right and left inward, and paſſe through the Muſkettiers into their places*; then *face* to the *front* and all is *reduced*.

Reducement.

Chap. 18. *Why it is neceſſary to know variety of formes: The way to make four ſeverall figures demonſtrated in this Chapter with their Reducements.*

He that ſhall always accuſtome himſelf unto one form of battell, gives his enemy too much advantage.

HE that will *Range his Battaliens* alwayes into one *form*, may be likned to that *Phyſician*, or *Chirurgion*, that for all *ſi kneſſes* or *ſores*, hath the ſelfe-ſame *potion* or *plaiſter*. Not conſidering, that *time, number, place, quality of arms*, and many other like *reſpects*, will be great ſticklers in the *ordering* of *Armies*. Moreover the *number* of the *enemy*, his exceeding; either in *horſe* or *foot*, the placing of his *Ordinance* the *order of his Array*; any of theſe, or other ſuch like, may induce the *politick* and *wiſe* Commander ſometimes to alter, and vary his *form*, as may be moſt *advantagious* for himſelfe, and *prejudicial* to his *enemy*. But proceed wee to the *figures* of this Chapter, the which may be done, either by a *ſingle Company*, *Regiment*, or *Army*. * Nevertheleſſe, although I have no more *diviſions* of *ſhot* in my *figures*: yet if you have numbers ſufficient to imbattell, then place more *diviſions* of *Muſquettiers* in the *wings, front, flanks, reer*, or any other needfull part, as I have demonſtrated by *little printed Squares*, ſo much for the generall. Come wee now to the particular *directions* for this following *Figure*.

* *Every Company ought to be two parts ſhot, the third part Pikes.*

The Direction to make this forme with a ſingle Company.

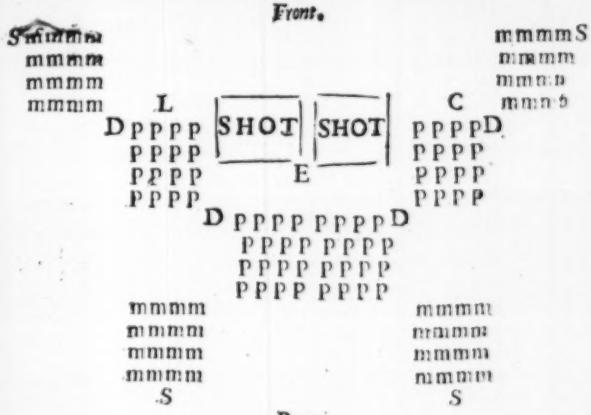
The Command is,

Front halfe-files, face to the right and left, March till your Pikes range even with the Muskets of the Reer halfe-files, then *ſtand* and *face to your leader*.

Halfe files of Muſquettiers face to the Reer, that done, *Muſquettiers both of front and reer diviſions, march to the Angles of your Pikes*, then *ſtand, and face all to your Leader or proper Front*.

Front,

Front.

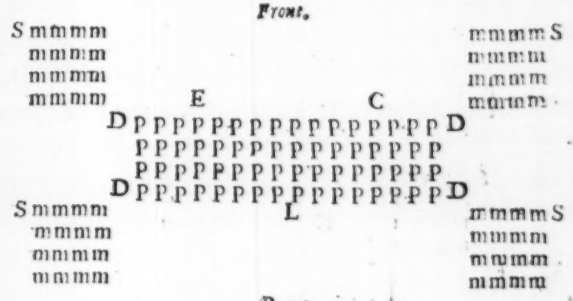


Reere.

In this *forme* you may give fire to the *Front* or *Reer*, or both together. You may *give fire* and ſtill continue your *forme*, or if you pleaſe, the *Battell* of *Pikes* may move forwards and *Range* even with the *flank-diviſions* of *Pikes*, the *reer-diviſions* of Muſketiers *facing outward*, and moving after the *front-diviſions* of Muskets, even with the *Reer Angles* of Pikes, which produceth this enſuing *Figure*.

The way to fire, and alter the forme.

Front.

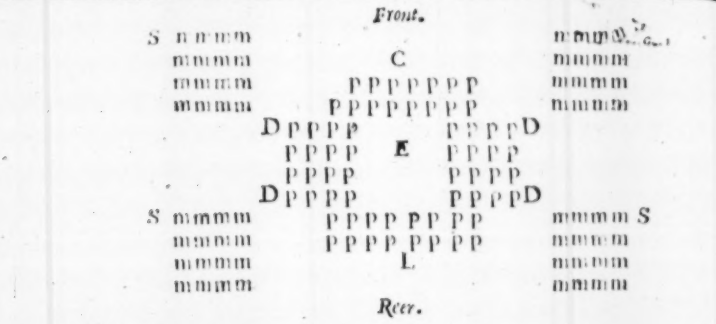


Reere.

If you cauſe the two firſt *ranks* of the ‡ Battell of *Pikes* to move forwards, and the two laſt *ranks* of the Battell of *Pikes* to move towards the *Reer*, it will produce this enſuing *Figure*.

‡ *The battell of Pikes are thoſe under* E. *in the firſt figure of this Chapter.*

Front.



Rear.

* *Directions to make this figure, with a single Company.*

If you would *skirmish* on this figure, the Muskettiers are so placed, that they may give fire any way: *the divisions of Pikes* in like manner, either in *single bodies*, or *three* of them *a breast*, may move *forwards* into the *Front*, or if occasion be into the Rear, *porting*, and *charging* at discretion. Having *marched* or *fired* (or both) in this form: if you please, we will proceed to another. The words of Command, and direction are as followeth.

* *The two flank divisions of Pikes) open to the right and left, till you stand clear of your Musketiers* Secondly, *two Rear divisions of Musketiers, move forwards into the places of the Pikes that removed.* Thirdly, *two Front divisions of Musketiers move forwards, till you be clear of the Front of pikes.* This done, *open the two last ranks of the first divisions of Muskettiers to the right and left*, which presents this following Figure.

Front.

Rear.

When you peruse this *figure*, *sleight* it not, because of the *thinnesse* of the numbers in each part. But conceive that where *two ranks are placed single*, there for service, perad*venture two Companies* (or more) may be drawn up, and so *answerable*

ſeverable for each other part, according to the *number and ground*. When you *give fire* upon this *figure*, whether with a *ſingle Company*, or more *conjoyned*, it muſt be in a *Regiment all* way. The *Pikes ſtand ready ordered*, if need be, to *relieve the Muſketteers*. But come we now to the *Reducement* of our Company againe to their *firſt order*, wherewith we will conclude this Chapter.

Two laſt ranks (of the wings) *of Muskets, cloſe your Diviſions. Reer diviſions of Muſketteers, move forwards, and cloſe your diviſions, after the Muſketteers in the Front. Two firſt ranks of pikes, cloſe back in the two Ranks in the Reer. Flank diviſions of pikes, face inward, and cloſe your diviſions.* Laſtly, Command, *Pikes, move forwards and even join Front of Muſketteers.* If there bee any *Intervals* (or Diviſions) in the *flanks*, Cloſe them, and all is Reduced as at the firſt.

Chap. 109. *The Trained bands, one of the three main ſtrengths of this Land; the wayes to make them perfect Souldiers in the handling their Arms: The Checker Battell, with ſeverall other forms, either for a Company, or Regiment.*

IT was the *Spartan Glory*, being demanded of her *walles*: to preſent a groſſe of *Military bodies*. Wherewith they not only form'd my *Ages* defended themſelves: but *raiſed their fame* to ſo *high a pitch*, that they became *Terrible* to others. Our *England* with *Sparta*, hath no other *Forts, Faſſineſſe*, or *Fortifications*, to withſtand the Enemy ſave our (I would I might have ſaid *Experimented*) *Souldiers breaſts*. Take a Survey of the whole, and you ſhall ſee, that the ſtrength of our Land (like the *Roman Legions*) conſiſts of our ‡ *Haſtati, Principi*, and *Triarii*.

‡ *Took, his Legend of* Brittin-mart.

Our *Sea-men* in their *Wooden Forts* and *Caſtles*. Our *Rocks, Shelves*, and *Sirtes*, that *lye along our Coaſts*. And our *Trained Bands* on the *Land*; our *laſt refuge*, and *Chiefe Bulwark* of defence. Now conſidering the *facility* of the two *former*, how carefully ought we look to the *latter*: That our *Souldiers* be often *practiſ'd* and taught their *poſtures*, and well *handling* of their *Arms*: That there bee places provided for the * *Muſquettiers*, to *ſhoot bullets* at the *mark*, and *priſes* for them that doe beſt. That there be places appointed for ſome *ſquadrons*, and *diviſions* of each *Arms*, to meet for one *hours* or *two* in the *week*, attimes moſt convenient; to bee inſtructed in *motions* and *firings*, by the ſeverall *Officers* of each *Company*. That there might be ſome *Immunity, Priviledges*, or *Allowance* to the *Officers* of the *Trained Bands*, towards their expence of time and charges. That there ſhould be *Countenance* and *incouragement*, given to thoſe that are *diligent* in the *practiſe* of *Arms*, and the *ſtudy* of the Art *Military*. Theſe, and ſuch like hony-dewes, would water the parched barrenneſſe of our *Militia*, and fatten the Root, to a fragrancy of experiment: Imitating, and ſuppling the nerves and joynts, to an activeneſſe of motion. The want hereof, leave us dull and ſnoring, in the lap of ſtupid ſecurity: and renders us ridiculous, in the eyes of our enemies.

* *Many of the Trained Bands dare not ſhoot a bullet for want of practice. And very few know, what proportion of powder to uſe to give the due charge.*

But pardon my digreſſion, the zeale of my Countries good, had almoſt intricated my intentions: Calling me a-ſhore, where I had not the leaſt intent to ſee the Land. Now with your good leave, I return to the work of this Chapter. In the which, and the former I for the more delight of ſuch Captains, and other Gentlemen, that love to practiſe numerous forms and figures of Battell, have fitted and ſtored them with variety; Some for the curious and

quainter Souldier: Some for the follid and and experimented Souldier; and some to direct the unskilfull and ignorant Souldiers; That so either may come and feed according to his own fancy, and not be cloyed with a continuall intercourse, to one and the selfe-same dish. The Command and direction for the first Figure followeth.

The Command is, *Two first and last ranks of Musketiers and Pikes, interchange ground.*

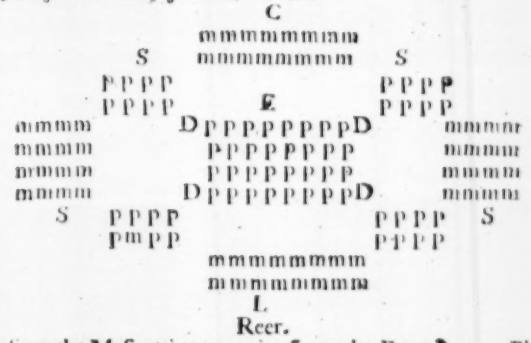
This done, *Musketiers move till you all stand clear of your Pikes.*

The direction is. *Two first, and last ranks of Pikes, face to the right and left outward. Two first and last ranks of Musketiers, face to the right and left inward.*

That done, *Interchange ground, as before.*

Lastly, *Let the Musketiers of the Front, Reer, and Flanks, move to the Angles of the Pikes, and face all to the first Front.*

With larger numbers where these are but two deep, make them 6. 8. or 10. deep. This is a very good form for the Musketiers, with half-pikes.



In this form the *Musquettiers* may give fire to the *Front*, *Reer*, or *Flanks*, any way, or every way. If you fire to the *Front*, the *Musquettiers* of the *Front division* having fired two or three times over; the two *divisions* of *Pikes* on their *Angles* may advance and charge, whilst the *Musquettiers* that last fired, face to the right and left by *division*, and place themselves behind their *Pikes*; the *Musquettiers* of the *Flanks* in the *interim*, moving forwards, and firing at discretion; The *Reserve*, or *Reer-division* of *Musquets*, may in like manner bee brought up to fire, as you see fit; each *division* may be sheltred by their Pikes. From this take a second *Figure*, with alteration. The command, direction, and figure followeth.

By two outmost Files, understand the two outermost Files on each part, as well of Front and Reer, as flanks. And although two deepe, cannot properly be termed a File; yet let it produce no criticisme, seeing it could not bee avoided, considering my number.

Two outmost files of each Flank of the Front division of Muskets: move forwards to the Angles of your own division.

Two outmost files of the Reer-division of Musquets: move to the Reer Angles of your own division of Musquets.

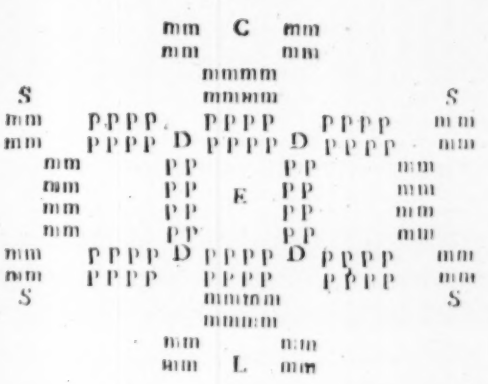
Two last Ranks, of the outmost files of the Flank divisions of Musquets, face to the Reer, and move to the Reer Angles of your own divisions.

Two first Ranks of the two outmost files of the flank divisions of Musquets: move forwards to the Front Angles, of your own divisions.

Four inmost files, of the Battell of Pikes, face to the Front and reer: (then) move to the Angles of your own division of Pikes, The whole Body face to the Front.

Front,

Front.



Rere.

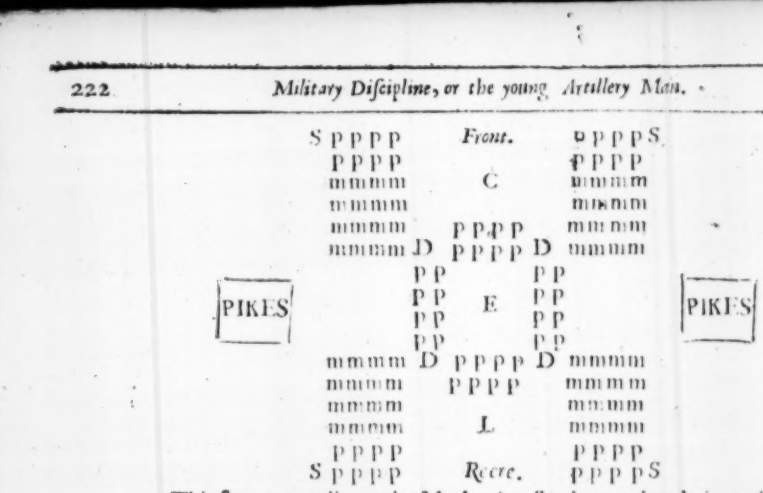
This is a very good forme for the Muſkettiers with halfe Pikes.

Although this *Figure* be here demonſtrated by ſuch ſmall *diviſions* of men, let it not perplex the opinion of its worth, rather caſt your eyes on the ſeverall *Diviſions* of each *Armes*, and ſuperviſe their orderly placing. How offenſive to the Enemy, how defenſive to themſelves. To demonſtrate the ſeverall wayes of *firing* upon it, would prove as tedious as needleſſe. Let it ſuffice that they may *fire, advance, retire, powre on their ſhot, and retreat behind their* Pikes, *inlarge* their *intervalls*, or *joyne into one groſſe*, any of them, or all of them at diſcretion.

A firing to produce another figure.

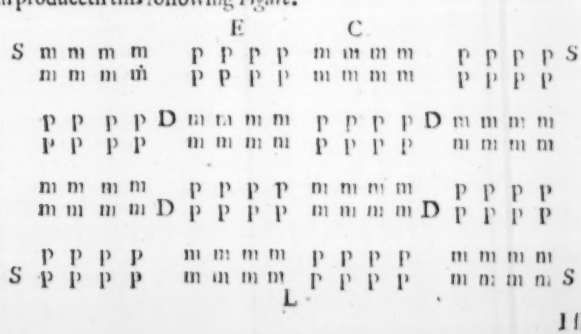
Come wee now to a *firing*, that ſhall produce another *Figure*. Let the *firing* be directed to the *front* and *rere*, and to that end command *halfe the Body to face about*, the outmoſt files of Muskettiers (which were advanced) begin the *firing*, doing their *execution* on the ſame ground (without moving forwards at all) by which meanes they become even in *rank* with the *Muſquettiers* from whence they were drawne, and ſo give *fire* together once or twice over.

You are further to obſerve, that the *Diviſions* of Pikes, on the wings, are in the interim to advance forwards, beyond the Muskettiers, there *charging* their Pikes; the Muskettiers then having *fired* againe, are to *face* to the *right* and *left* outward, moving and placing themſelves behind the *Diviſions* of Pikes. The *flank-diviſions* of Muskettiers in the interim of the Pikes *charging*, are to give *fire* after the ſame manner as the others did before them; And laſtly place themſelves behind the *ſhot* that began the *firing*. The *Bodies* of Pikes in the midſt of the *Battell* (if occaſion be) may move forwards and *charge*; if they keepe their ſtanding, and *face* to the firſt *front*, this inſuing *Figure* will be produced, &c.



This *figure*, according as the Muske tiers ſtand now placed, is moſt fit for *firings* by *extraduction*, but may by drawing forth of the Musketiers, be varied into ſeverall other formes, as the occaſion and diſcretion of the Commander ſhall thinke meet, as the *Quadruple Horne Battell* to *Front* and *Reer*, and many others. Nevertheleſſe, becauſe I would not be tedious, I will next forme the *Checker Battell*. * Therefore to that end cauſe the Pikes in the *midſt* to *cloſe their Diviſions*, that done, *let the Battell of* Pikes *face* to the *right* and *left outward*, and *place* themſelves even *between* the *Diviſions* of Musketiers and *all face* to the *Front*: this being done, the Body ſtands divided into two deep *hearſes*. Next command, *firſt foure Ranks* (of each hearſe) *ſtand*, the reſt by four *ranks* in a *Diviſion*, *move forward*, and *Range even* with the *Front*. This being performed, your Body ſtands in a long *Checker battell* foure deep, and thirty two a breſt. If you will make them eight deep with *Diviſions* foure of each Armes; *checkerwiſe*, command one of the *flanks* to *double* the other by *Diviſion*. If you pleaſe to make ſixteen *diviſions checkerwiſe* and eight deep (which is the figure now intended) command, *left flank double the depth of your right flanke intire*, the which produceth this following *Figure*.

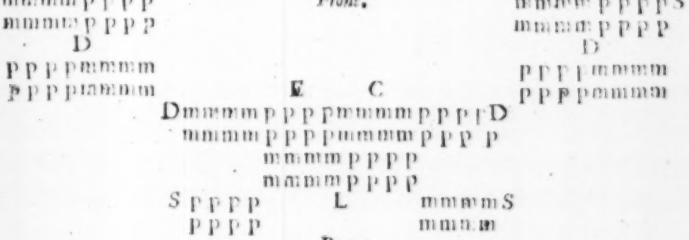
* *The direction to make the Checker battell, either with ſixteen diviſions of each armes, or with eight diviſions.*



I ſhould

I should be much too tedious, should I inlarge my selfe upon severall firings and *figures* of Battell, that might be drawne from this *Checker* forme. I shall demonstrate one, and so draw towards a conclusion of this Chapter; for the which command the * *Front halfe of the Body to face to the right and left outward, to move to the Angles of the standing part of the Body*, that being done, *stand, and face to the front againe*, next command *the two reer Angle-divisions to face about, and move to the Angles of the standing part of the reer, then face to the front againe*, and it produceth this following *Figure*.

* *By front halfe, is to be understood, that halfe of the Body, next to the front.*



Any ingenious Souldier at first sight, may contrive severall waves and firings upon this *Figure*. And therefore not to discourse what may be done, nor with what varieties to be done, I will come to the *Reducement*.

Reducement.

To which end, in the first place, *close your Divisions* againe into the *Checker Battell*.

Secondly, command the *Front-halfe of the Body face to the right*, and *move* untill they are *cleer of the standing part*, then *face as before*.

Thirdly, command the four *outmost files, to the right of each division stand*, the rest of the Body foure *files in a Division, invert after the right divisions*. Now your *Body* stand in two *hearse Battels*, let the *hindermost* move forwards even abreast with the *formost*, keeping the *Interval open* betweene them.

Fourthly, command all the *Pikes of both Divisions face inward and close their Divisions*.

Lastly, command *Muskettiers and Pikes both of front and reer, close their Divisions to the Battell of Pikes*. This being done, and *all faced* to the *proper fronts*; they are perfectly *reduced* as at first.

Chap. 11o. *How a Captaine or superiour Commander ought to be qualified: what is requisite to every common Souldier. The use of variety of formes and figures of Battell with severall Regimentall formes that may be practised with a single Company, and the Reducement.*

Politick stratagems have many times procured great victories.

NExt after our *prayers* for blessings from above, *Policy* and *stratagems* of *Warre* have beene found most prevalent, as more availing then numerous strength; seldome faylyng, most time gaining the *Wreath* or *honour*.

Yea,

Yea, perhaps by some mean and ordinary *wife*, the which being once knowne, growes despicable, as falling within the capacity of the meanest judgments. Of this holy *Writ*, as well as profane history, is stored with sufficient examples.

A second means, conducing towards the advance of victory; is the * *Love* of our Generall, Captain, or Commander; a *Item*, more prizable and esteemate, then the best *Armours of proof*; as being of such force with the Souldier, that he will never shun danger, nor refuse to hazard the greatest difficulties; the further thereby to ingratiate himselfe into the favour of his worthy Captain, whom for his vertues he really affecteth. For the attaining or gaining this love of the Souldiers; It were necessary in the first place that such Commanders were knowne to bee well qualified with skill, having good (*a*) *Experience* of the *warres*: for the Souldiers will not easily flinch or flye from such a Commander, whose wisdome, skill, and experience, they are well assured of. Secondly, ‡ *Vallour* of our Captain is not of least importance to confirme the minds of the multitude: for the courage and skill of the Commanders, makes even a cowardly people hardy: the want thereof works the contrary effects. Thirdly, (*b*) *Justice*, for that Captain which with equity and justice can rule his Souldiers, neither suffering them to doe injury to others, nor receive wrong to themselves, shall gaine the love of his Souldiers, and feare of his enemies. Fourthly, (*c*) *Temperance*: and fifthly, (*d*) *Liberality*. These together build up a man fit for the Imployment of his *Prince* and *Countrey*. But whether am I soaring? let me check my flight, and return to the common Souldier.

"*Zenophon* declareth that such Souldiers, as serve God, and are obedient "to their Captaines, may boldly, and courageously fight with their enemies, "not doubting victory. Adde these three other pertinent necessaries to every Souldier. First, To (*e*) *harden the body*, that so it might be *inured*, and made *capable to endure paines, want, and travell* with patience. Secondly, To *hand'e* our *Arms* with *facility and safety*. Thirdly, to learn to keep our *orders*, in *marching, incamping*, and *fighting*. The which as it cannot alwayes be, in one and the selfe-same *forme*; neither ought the *Armes* to be alwayes *placed* after *one* and the same *manner*; but be *varied* according to the *occasion*, and the wise foresight of the *politick Commander*; Therefore whosoever would be perfect in this part of the *Art Military*, must often accustom (*f*) himselfe to the contriving, and *drawing forth* of many and severall *forms* of *Battell* consulting their severall *uses*. As some against *Horse*, others against *Foot*, some against *Horse and Foot*: some for *Streights*, some for *Campania*, some for *Hilly and Mountainous places*; other for *vallies*, and *watry places*: some for *boggy and rotten* ground; some for *woody and bushy grounds*; some for *night*, and some for *day*. These notwithstanding *time, number*, and *place*, will thrust in *accidents*, and often cause *alteration* of the most *setled*, and *selected form*. Nevertheless, the *Captain* thus *sorted* for all occasions (*like the skilfull Chirurgion having salves for every sore*) may with more *boldnesse* addresse himselfe to such enterprises, as by *Command*, or *chance* shall be *cast* upon him.

These considerations prompt me to proceed: questioning the length of my discourse, that hath so long detained you from the *figures* of this Chapter. The which that I may timely remedy, Take the (*g*) *Command*, and *direction* for this following *Figure*. Command the *Musquettiers* of the two first and last *Ranks* face inward,

* *The Souldiers love to their Generall, a matter very considerable.*

a *Experimented skill.*

‡ *Valour.*

b *Justice.*

c *Temperance and*

d *Liberality.*

e *Souldiers should inure their bodies to hardship.*

Hannibal, *effeminated his Souldiers: by once wintering them in* Capua.

f *Excellent Commanders doe often accustom themselves to contrive and imbattell severall forms.*

g *The command, and direction, to make the following Figure.*

inward, the *Pikes* of the ſame *Ranks*, face outward, and interchange ground with the *Muſquettiers*. Secondly, Command the *Reer-half* of the eight innermoſt *files*, face about: (that done) Laſtly, Let the eight *files*, ſo faced to the *Front* and *Reer*, move to the innermoſt *Front* and *Reer Angles*, then ſtand, and face all to the proper *Front*, by which this *Figure* is produced.

Front.

C E

m m m m m m m m m m
m m m m m m m m m m
p p p p p p p p
S p p p p p p p p S
p p p p D D p p p p
p p p p p p p p
m m m m m m m m
m m m m m m m m
m m m m m m m m
m m m m m m m m
p p p p p p p p
p p p p D D p p p p
S p p p p p p p p S
p p p p p p p p
m m m m m m m m m m
m m m m m m m m m m

L

Reer.

Having *fred* at diſcretion upon this *Figure*, and brought them againe into the ſame *order*, Obſerve a ſecond *form*, drawne from the firſt. To make the which, Command the firſt foure *Ranks of* the *Flank* diviſions, face outward, and move cleare of the laſt four *Ranks*: then ſtand, and face as before. Secondly, Command the *Front-diviſion*, open to the right and left (untill they have made a ſufficient Intervall to receive another Diviſion) then ſtand. Thirdly, Command the *left Flank* (or *halfe Ranks*) of the *Reer-diviſion*, advance forwards, and place themſelves behinde the intervall, of the *Front-diviſions*. Laſtly, Command the *Muſquettiers*, on the outermoſt diviſions, face outward, and move cleare of their Pikes. Theſe Commands duly executed, renders thisfollowing *Figure*.

The Muſkettiers of the Flank diviſions, may be drawn forth clear of their Pikes, and fire any way, according to direction, or they may give fire by extradition.

Front.

C

S m m m m m m m m S
m m m m m m m m
p p p p p p p p
p p p p p p p p
D D E D

p p p p p p p p
S m m m m p p p p m m m m S
m m m m m m m m
m m m m m m m m
m m m m D D m m m m m
m m m m m m m m
p p p p p p p p
p p p p p p p p

p p p p
p p p p
m m m m m
m m m m m

L

Reer.

This *Figure* ſtands very apt for *fight*, each *Armes* being ſo placed, that they may be ayding and aſſiſting to the other. The *Diviſions*, *Maniples*, or *Battels* are ſo orderly contrived, that they may advance, retreat, or relieve one another, without any let impediment, or incumbrance. When you have given *fire* at diſcretion upon this *figure*, if you would come to a *Reducement*, *cloſe the Diviſions back into their places from whence you drew them*, and cauſe *the* Pikes *of the two firſt and laſt ranks to interchange ground againe with the* Muskettiers, this done, all is Reduced as at firſt. But before we come to the concluſion of this Chapter, proceed wee to ſome *other formes* to ſatisfie the deſirous. The Commands, Directions, and *figure* follow: ‡ *Halfe-files*, (of each Armes) *face to the right and left outward, and move* (untill the Pikes ſtand right) *after the Muſkettiers of the front halfe-files*, then *ſtand and face as before.* Secondly, command *halfe-files of Muſquettiers to face about and move downe even with the Reer-angles of* Pikes, then *ſtand, and face to the front.*

‡ *The directions to make the following figure.*

By the execution of theſe Commands, this *Figure* is produced from the *ordinary ſquare* of Pikes flanked with Muskettiers.

Front.

E C

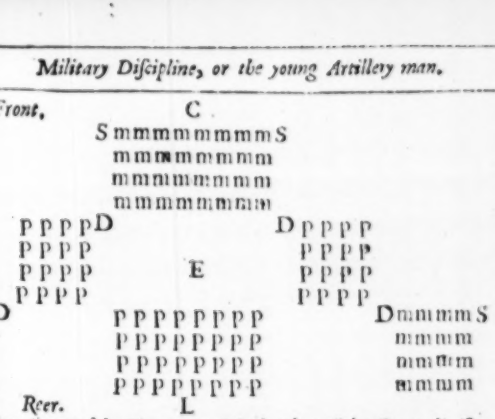
S m m m m D p p p p p p p p p D m m m m S
m m m m m p p p p p p p p p m m m m m
m m m m m p p p p p p p p p m m m m m
m m m m m p p p p p p p p p m m m m m
P P P P P P P P
P P P P P L P P P P
P P P P P P P P
P P P P P P P P
S m m m m D D m m m m S
m m m m m m m m m
m m m m m m m m m
m m m m m *Reer.* m m m m m

This *Figure* at firſt ſight, ſhews want of *reſerves* in the *Reer*, the which muſt be ſupplied either by number, by nature by art. If number be wanting, the *naturall ſcituation of the place affording Ditch, Wood, or River, may ſuffice as a reaſonable *defence*. If number and nature be both niggardly in their aſſiſtance, then let art ſupply the defect by impaling the *Reer* with the Wagons, Carts, and Baggage of the *Army*. Having given *fire* on this *figure*, as you may ſeverall waves, ſometimes placing the *Muſquettiers* in the *Reer* of their owne *Diviſions*, and ſometimes in the *Reer* of the *Pikes*; the *Pikes* in the meane time ſometimes *poſting*, ſometimes *charging*, ſometimes *advancing* forwards, and ſometimes *retretting*. From this take another *figure*, the which is thus to be made, *Face the whole Body about*, and command the *Muskettiers* (the which then are in the ‡ *Front*) *to cloſe their Diviſions*. Laſtly, cauſe the *two Reer Diviſions of Muskettiers, face to the right and left outward, and move cleer of the Pikes*, the which ſtood before them, (this done) peruſe the *Figure*.

* *Naturall ſcituation availes much for the defence of a battell.*

‡ *This facing about hath made the Reer, the Front.*

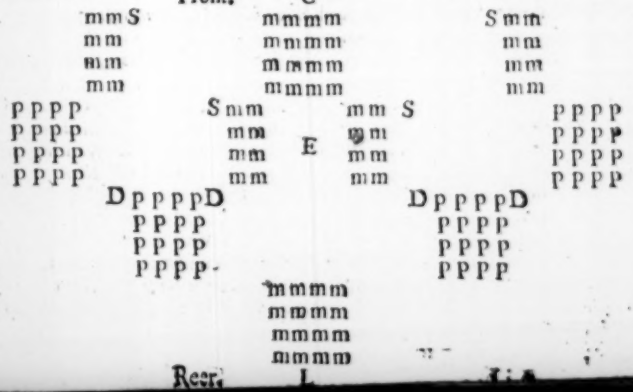
Front.



When you give *fire* on this *Figure*, the *Muskettiers* of the *Front-diviſion*, are to *wheel* off, to the *Right* and *Left*. Nevertheleſſe, if you would have them *wheel* all off, to the *Right*, then open the *Muſquettiers* in the *midſt*, and make them an *Intervall*. Having *practiſed* and *tri'd* your Souldiers, ſufficiently on this *Figure*, we will come to another; but firſt, * *face your body about again after their proper file-leaders*. Secondly, Command the *Front-diviſion of Pikes*, *face to the right and left* (then) *move* (and place themſelves) *before the two other diviſions of Pikes*. Thirdly, Command the *two Front-diviſions of Muſquettiers move forwards untill the reer be even with the Front of Pikes*: (then) *face inwards, cloſe their diviſions, and face to the Front*. This produceth a *hollow ſquare*, the *Muſquettiers* being in the *Front and Reer-diviſions*, the *Pikes* on the *Flank-diviſions*, I forbeare the *figure*, being the ſame, with that in Chapter 101. Proceed we to our next Figure, to make the which, firſt Command. * *Two out-moſt files of each flank of the Front-diviſions of Muſquettiers, face to the right and left*, (then) *move to the out-moſt Angles of your Pikes*. Secondly, Command the *two out-moſt files of each flank*, (of the *Reer-diviſion*) *of Muſquettiers, ſtoave up on the inſide, of the Front-diviſion of Pikes*. Thirdly, Cauſe the *Front half-files, of each diviſion of Pikes; face outward, and move to the out-moſt Angles of your wings of ſhot*. Face all to the Front.

* *The Body refaced about, after the proper file-leaders.*

* *The direction to make this following figure.*



It were needleſſe to tell you that this *figure* is moſt eſpecially uſefull for *firings* in *Front*: Nevertheleſſe, it may in like manner very fitly ſerve for *firings in the Reer*, provided that you *face them about*, and *then move forwards your ſmall diviſions of Muſketiers into the Front*, By which means in like manner it might be made a ſerviceable *firing*. But not *deſiring* to be tedious, I will come to the *Reducement*, and ſo conclude this Chapter. Firſt, Command the *two outmoſt files* (*or wings of Muſketiers face inward, and cloſe their diviſions*. Secondly, Cauſe the *Muſketiers in the Reer*, to *move forwards into the Intervall ſtraight before them*. Thirdly, Command the *outermoſt diviſions of Pikes face inward, and cloſe before the Reer-diviſions of Pikes*: then *face as before, move forwards, and even the Front of Muſquettiers* (this done) your Muskets are all in e *midſt*, the Pikes on the *flanks*. Laſtly, Command *Muſquettiers and Pikes interchange ground*. This brings all into the firſt order.

The Reducement.

Chap. 111. *Of the Muſquet and Half-pike, with the ſeverall wayes that have been tried to make the Muſquettier defenſible againſt the horſe: As alſo, ten queries objected, to the Half-pike and Muſquet.*

WHen I firſt began this Edition, I had not the leaſt intent to ſpeak any thing of the uſe of the *Half-pike and Muſquet*, but have wholly reſerved it untill another time; yet at the importunity of ſome of my familiar friends, though it were late, yet they were not willing it ſhould be left out. Nevertheleſſe, when I conſidered that it had been the *unhappy fate*, of the *greateſt and beſt inventions*, to be imbaſed and vilified; yea, and to be accounted of, but as idle fancies or dreams before they were publiſhed, and being once made knowne, ſuffering too much imbaſement, as being often undervalued; and accounted of but as a thing that every one could have well performed. And hereof I might demonſtrate many examples: Wherefore if the *paſſion* of envy have in it any thing *allowable* and *naturall*, as having *anger*, *feare*, and other like *affections*: it is in ſome ſuch caſe as this, and ſerveth againſt thoſe which would uſurp, and take to themſelves the *knowledge* and *invention*, wherewith *God* hath denied to indue them.

Therefore were it not for the common good, and the great affection that every one ought to beare to his countrey: it would appeare more commendable in wiſe men to conceale their ſtudies, making their *Funerals* in their own *boſomes* (whence they had their firſt *birth*) rather then to expoſe them to the publike, where *vertuous ſtudies are too often cruciated*, by the *darts of envy*, which *malignant ſpirits*, too *frequently powre upon them*. Notwithſtanding I will not altogether diſcourage my ſelfe, although I know by ſufficient triall, that *Cynicks will bark at thoſe they know not*: and *others* of *as bad a nature*, will *accompany* their *clamours*. For ſo it is with the inconſiderate multitude, who wanting that *vertue*, which we call *honeſty*, and that *ſpeciall grace* which we call *charity*: *condemn* without *hearing*, and *wound* without any *offence given*. This I can ſpeak with *pitty* to my ſelfe, as having too frequent and familiar *experience* thereof. But of theſe *Natures*, that *lye as it were in* * *ambuſh*, to carp and find fault, endeavouring to wreſt good intentions, to their evill conſtructions: ſeeing the *wiſe man* complained of ſuch long ſince, and that *Nature* hath not been wanting, to thruſt off the ſame brood dayly into the World, as bad, and perhaps

* *Eccleſ.* 11. 31.

more

more malicious: I will leave them to their easie wayes of reprehension, then which, there is nothing of more facility, and return to the work of this Chapter.

Having often considered the danger of the *Muskettier*, and how unable he is to resist the *Horse*, after he hath poured forth his *shot*, without he be sheltered, either by some *naturall* or *artificiall defence*; And withall having knowledge, that in severall parts of *Christendome* divers Captaines and Souldiers, have oft been trying conclusions, to make the *Muskettiers* as well *defensive* as *offensive*. Some by unscrewing the heads of their *Rests*, and then screwing the staffe of their *Rests* into the muzzell of the *Musket*, with the *arming* of a *Pike*, at the *lower end*, by which means they would use the *Musket* and *Rest* together, in the nature of a whole *Pike*. But this proved so tedious and troublesome, that it fell without profit. Another sort had made *Rests* with the one end of the *fork* (or head) being like a *spike*, about 18. inches in length: this also proved extream troublesome to themselves, *dangerous* to their *fellowes*, and of no *validity* against the *enemy*. A third sort had *Half-pikes*, of about 7. or 8. foot in length, using it after the manner of a *Rest*: but all the while the *Muskettier was charging* (his *Musquet*) *one* of them was *enough* to trouble a *whole file*, besides the danger in the *recovery*. A fourth sort there was (yet better then the former) that with a *hook was fastned to the girdle, the while the* Muskettier *was making ready*: but this had his defects also, as being both *tedious* and *troublesome*. Many other wayes and conclusions, have also been tryed; with *successe* like the *former*: which I forbeare to demonstrate, for as their conceits proved uselesse, so the discourse would prove as fruitlesse. Lastly, my *selfe*, with another * *Gentleman* of *our ground* (both well affecting the use of the *Musquet*) found out a *way*, to use the *Half-pike* and *Musquet*, with so much *facility* and *ease*, that it is *farre lesse troublesome then the rest*: and yet of a *greater length*, then any of the former *Rests*, or *Half-pikes*; as being compleat ten foot in length, with the *arming*.

* *Master* Iohn Davies *of Black friers.*

All the former *devices*, if they could have been brought to any *maturity*: yet would have falne farre short of this, for the *triple use thereof*. As being a *Rest*, if there be no farther occasion; As being a *Pallisado* (if there be occasion) to *defend the Musquettier from the Horse*; As being a *Half-pike to use in Trenches*; As also when our *shot* have *poured out a great volly or showre* of *Lead* on the *adverse Musquettiers*, they may then *nimbly* with their *Halfe-pikes*, *fall in amon them*. And lastly, for the *pursuit* of an *enemy*, it being of all others, the *best weapon*.

* If a *party* of *Musquettiers*, were to be sent out; those using the *Half-pike*, of all others are the fittest, for that they are able to *offend their enemies*, and best able to *defend* themselves. If after they have given *fire*, they should be *overtaken* before they have *made ready againe, and charged by the Horse*; Yet they are *able to defend* themselves, with their *Half-pikes*, even in the time they are *charging*: for the *Front-half-files* may *couch* with their *Half-pikes charged brest-high*, *and swords drawne*, *and keep off the Horse*: whilst the *Reer-half-files* give *fire* over them, whereby they will be sufficiently *able* to *defend* themselves, and *annoy their enemies*. In a word, the *Half-pike* and *Musquet* for them that know how to mannage it, is of so *excellent use*, that the worth thereof cannot, nor ought not to be confined to the poor demonstration of an unskilfull writer, that will not take the liberty of a Hen to keckle over her own egg: but leave it to the wide world

* *Muskettiers with Half-pikes fittest to be sent in parties.*

to vindicate its own reputation. Therefore now let us come ſomewhat nearer, and examine what queries, or objections have been made againſt it; and you ſhall find theſe ten following, viz.

1. *Whether Muſquettiers with Half pike s being to encounter againſt Pikemen and Muſquettiers with Reſts (ſeeing there hath been no triall) whether Armes, in reaſon, would have the advantage.*

2. *Whether the Muſquet and Half pike be as ſerviceable againſt Horſe, as the Muſquettier with the Reſt and whole Pikes.*

3. *Whether the Muſquet and half-pike, can as conveniently be uſed in all reſpects as the Muſquet and Reſt.*

4. *Whether the Muſquet and Half-pike be uſefull in Trenches and Fortifications.*

5. *Whether the Muſquets with Half-pikes can be uſed in woods, where ambuſhments are uſually laid, if not, where thoſe Half pikes are to be beſtowed.*

6. *Whether the charge wherein the Half-pike exceeds the Reſt, will be countervailed by the ſervices it hath beyond the reſt.*

7. *Whether in Company or Regiment it be convenient, and neceſſary, to have whole Pikes, or no.*

8. *Whether Palliſadoes or Swines-feathers, be not as ſerviceable againſt the Horſe, as the Half-pike.*

9. *Whether if all theſe quiries and objections have a ſatisfactory anſwer, it be neceſſary or convenient, that the uſe of the Half-pike and Muſquet be knowne, before we have publick occaſion for ſervice.*

10. *Whether the waight of the Half pike, by which it exceedeth the Reſt, be not more troubleſome counterpoiſing all the benefits it hath before the Reſt.*

Theſe *Quiries* have been urged by men not of the meaneſt *Rank*, nor *skill*, but even of ſuch whoſe opinions were very conſiderable, and whoſe judgements could not *eaſily be miſled*; unto which they received ſuch ſatisfactory anſwers, as you may further peruſe in the Chapter following.

Chap. 10. *The ten Quiries objected to the Musket and Half pike fully anſwered. The Half-pike joyned with the Musket approved to be very uſefull, as having received approbation from divers Souldiers of great Rank and Quality.*

HAving in the laſt Chapter ſhewed the queries obiected to the *Half pikes* and *Muskes*; Come we now without preamble, to give an anſwer to each of them ſucceſſively. To the firſt we ſay, That * *Muskettiers* with *Half-pikes* have the oddes, againſt *Muskettiers* with *Reſts* and whole *Pikes*, for theſe and ſuch like reaſons; for preſuppoſe what number you pleaſe, the one halfe whole *Pikes*, the other halfe *Muskettiers* and *Reſts*. The fight being begun at diſtance (as muſt needs bee conceived) the *Half-pike-men* poure on a great deale more ſhot, at leaſt three to one: by which meanes the adverſe part muſt needs bee broken and ſpoiled, before they can poſſibly come up to the *puſh* of *Pike*. Secondly, They that eſcape death and wounds if their hearts ſerve them to come up to the *puſh*, will be ſo weary, windleſſe, and out of order with their haſt, that they will not be able to ſtand againſt their Adverſaries, who keeping their ground, will neither be weary nor out of order. Thirdly, The

* *To the firſt.*

Muskettiers

Musketiers that come up *a-breſt*, even with their *Pikes* will with them be ſuf-
ferers of the like inconveniences: and now being come to cloſe fight, are not
poſſibly able with their *Reſts* to withſtand the better armed *Halfe-pike-man*.
Fourthly, if there were any reaſonable proportion of whole *Pikes* joyned with
the *Half-pikes* and *Muskets*; the advantage then would be unqueſtionable.

To the ſecond we ſay, That *Musketiers* with *Half-pikes*, inſtead of *Reſts*,
are more ſerviceable againſt *Horſe*, then whole *Pikes* and *Musketiers* with *Reſts*,
for theſe reaſons: Firſt, Whole *Pikes* alone are too weak, becauſe the *Horſe-man*
carries fiery weapons, and can kill the *Pike-man* at diſtance, they neither being
able to defend themſelves, nor offend their enemies. Secondly, *Musketiers*
with *Reſts*, are not able in open *Campania*, to withſtand the able and reſolute
Horſe-men, which will *break* them through, and through. Thirdly, Both con-
joyned one *body* are too weak in open, and even Countries to withſtand the
Horſe: for if your *Pikes* be *ſanked* with *Musketiers* (according to the uſuall
manner) then the *Horſe men* kill the *Pikes* at diſtance (as aforeſaid) and *rout* and
plunder the *Musketiers* on the *flanks*, they having little poſſibility of aid from
them *Pike-men*, when the *Horſe* are entred *pell-mell*, amongſt the *Musketiers*,
knocking and treading them down. Fourthly, if they draw into any other
forme of *impalement*, then one armes becomes a trouble to the other, neither
being able to perform their due execution. Fifthly, *Musketiers* with *Halfe-
pikes*, are able in any *form*, or *figure* of battell, to defend themſelves from being
broken by the *Horſe*: and by ſo much, as their fiery weapon doth exceed the
Horſe-mans in execution; by ſo much they will be too ſtrong for him in the open
field: and farre more in a ſtreight, or placed advantage, where either *Nature*
or *Art* hath ſecured the *flanks*.

To the third we ſay, That the *Half-pike* joyned with the *Muſket*; may as
conveniently in all reſpects be uſed for *eaſe*, and indeed is more accomodable
then the *Reſt*: being more *expedite* for *execution*, and farre more *ſafe* for *defence*.

To the fourth we ſay, That the *Reſt* is of no uſe in *Trenches* and *Fortifications*,
where men preſent upon a *breſt work* or *parrapet*: the *Half-pike* in ſuch caſes may bee uſefull; as when it happens they come to cloſe fight, where it
proves advantagious.

To the fifth we ſay, Neither *Reſts* nor *Half-pikes* are neceſſary or uſefull for
the *Musketier* to carry in woods and thickets: whether it be to lay ambuſh-
ments, or to the contrary, to ſearch them out, and beat them off. Yet in ſuch
caſes they are more uſefull then whole *Pikes*, being more eaſily managed.
Nevertheleſſe if it be in great *timber-woods* and *Forreſts*, there the *Half-pike* may
prove uſefull and portable. But if it ſhall bee found inconvenient for ſuch ſer-
vice; then they are to be diſpoſed in the *Carts*, *Waggons*, or elſe-where
as opportunity ſhall be offered.

To the ſixth we ſay, That the ſervice conſidered of the *Half-pike*, the charge
of it above the *Reſt*, is not conſiderable: for a ſerviceable *Half-pike* may bee
had for two ſhillings ſix pence, which exceeds not much the price of a *Reſt*.
Further, when it ſhall appeare, that the *Half-pike* and *Muſket* will pro.e more
advantagious to our *Nation* in caſe of *invaſion*, then it can to any *enemy invading*: then it may be preſumed, were the charge farre greater then it is, yet it
ought not to be neglected.

To *fence*,

* *The Reſt was deviſed onely for to eaſe men when the Muſkets were of eighteen or twenty pound weight: But now the Muſquets are made lighter (as not exceeding ten pound, or tenne pound and a halfe in the Magazins) the Reſt is of ſmall uſe: therefore no marvell, the Souldiers throw them away. But the Half-pike is an offenſive weapon, yea ſo farre exceeding the Reſt, that it is many wayes more ſerviceable then the the ſword it ſelfe both for offence and defence.*

&

To the seventh we say, that *whole Pikes* by no means are to be left or neglected, because for some *services* they are especially *usefull*: notwithstanding a fifth part or fourth part at the most is sufficient, either for *Company* or *Regiment*; for the *Musquettiers are easily transferred into pike-men, by changing of their Armes* when occation requireth; But the *Pike-man* cannot so *soon*, nor so *easily* be made a *Musquettier*: when the suddennesse of the occasion, or the *quality of the warres* shall require it.

The Half-pike may be sooner grounded then the Pallisado.

To the eight we say, that *Half-pikes are equally usefull, and serviceable against the Horse as the Pallisado*, when in the same kind they are used, *viz.* Being struck or fastned into the ground; and hath these advantages above the *Pallisado* First, The *Pallisado* is alwayes *trouble some to the Musquettier in carrying*, being never helpfull in the *march*; But the *Half-pike* like the *Rest* (and better) affordeth *much ease* to him that carrieth it without *trouble*. Secondly, The *Musquettier* while he carrieth his *Pallisado* in his hand, cannot *give fire* upon occasion; but the *Half-pike* is then as *usefull* as the *Rest*. Thirdly, There can no use be made of the *Pallisado* against *foot*: But the *Half-pike* is then a *serviceable weapon*, and indeed is not onely *Half-pike*, but also hath all the accommodations, both of *Rest* and *Pallisado*.

To the ninth we say, because *England is ill furnished with Horse*, the benefit of the *Half-pike*, in defending the charge of invading *Horse*, is more necessary for us to *imbrace*, then for others: and therefore it ought by us *generally to be practised*.

To the tenth we say, that which hath been already delivered, and continuall *practice* will make manifest; First, That the *weight the Half-pike* hath above the *Rest*, is *doubly recompenced* by other *benefits*. Secondly, Experience makes it appeare, that the *weight*, though it be *more* then of the *Rest*; yet it is no wayes more *troublesome*.

Let me adde one *benefit* more of the *Half-pike*, although it concern none of the queries. The *Musquettier*, whether he use *Rest* or *Half-pike*, can doe no *execution* at any great *distance*; if he *want powder, match*, or *bullet*, the which often are in the one or other *found defective*; then the *Half-pike is usefull*. Secondly, Grant the *Musquettiers* to be well accommodated with *fixt Armes*, and well *fitted* with good *powder, match*, and *bullet*: yet sometimes the *extremity of weather*, even in the *joyning of the Batell*, may make the *fiery weapon of no use*, by *excesse* of *haile, snow*, or *raine*, or the like: But then shall the *Half-pike* have great *advantage* above the *Rests*, it then being *a serviceable weapon*, either *offensive* or *defensive*.

Now although this might suffice to give satisfaction to any rationall men: yet besides this, it hath had the *approbation* of many of the *better sort of Souldiers*, that have seen the *use* thereof. As Sir *Thomas Glenham Collonell*, a Gentleman of as serene a judgement, and as great a lover of *Armes*, as any I know in the *whole Kingdome*. As also *Lieutenant Collonell Chamberlaine*, an approved *Souldier* in most of the *German Warres*, the which have been in our time; who took such an especiall liking to it, that he caused a *Swedish youth* that attended him, to learn the *use thereof*, and two of *his Serjeants*. Many others both of skill, and quality, that have seen *it practised*, have also given their *approbation* unto it. But I would not be *tedious*, therefore take this one for all, the which may serve to

stop

ſtop the mouths of the moſt malicious: it is a Letter ſent by the Lord Viſcount *Wimbaldon*, to the Preſident, and *Gentlemen of the Artillerie-Garden, London*, the third of *March*, 1637. The Copy of which Letter I have *inſerted verbatim*, as followeth.

The uſe of the Halfe-pike and Muſquet together.

WHereas the *Half-pike* and *Muſquet* being practiſed by ſome *Gentlemen*, uſing Armes, in the *Artillerie-Garden*, which are Armes both *offenſive* and *defenſive*; And after conſideration of them, being deſired to give my opinion of their *uſefulneſſe*. Theſe are to certifie, that having well conſidered of the *uſefulneſſe* of the *Invention*, my judgement is, that *theſe Armes may prove very ſerviceable, and advantagious to the defence of the Kingdome, and therefore I hold it fit, that they ſhould be practiſed* for theſe reaſons following.

Firſt, That in regard that the *greateſt danger* of the *Kingdome* doth conſiſt in being *ſurprized*: and that there is nothing can *defend a Landing place better*, then *Horſe* with *Muſquettiers* behind them; So I hold the *Half-pike* the more ſerviceable, for that the *Horſe* ſhall carry both *offence* and *defence* by thoſe Armes, and in farre ſhorter time come to the *Landing place* then any *Foot*, the *Horſe marching* further in a day, then the *Foot* in three.

Secondly, They are better then *ſingle Muſquettiers to force a Quarter*, being mounted up behind Horſemen.

Thirdly, They are good in *Trenches*, for they will be able to *defend themſelves* with their *half-pikes*, after they have *diſcharged their Muſquets*, for want of which, the *ſingle Muſquettier* is forced to retire, to a great confuſion, and hindring thoſe that are behind them.

Fourthly, And above all things in *skirmiſhes*, when no Pikes are able to *defend them*, they are able to *defend themſelves*, and when they doe retire, as ordinarily they doe behind the *Reer* of the Pikes, being forced by a ſtronger enemy, they are *able to gall* the enemy upon the flanks, and doe great ſervice without danger.

Fiftly, In *narrow ſtraites and paſſages*, they can *defend* and *offend* more then any Pikes or Muskettiers; For where Pikes and Muskettiers cannot ſerve, they will doe *double ſervice* with ſingle bodies.

For theſe and ſome other reaſons, I approve of the exerciſe of them in your ſeverall meetings, and doe think it fit, *that all ſuch practitioners of theſe Armes* (which I could wiſh were more) *be not interrupted nor hindred in the uſe of them, but may receive good incouragements for the better proſecution, and finding out the compleat uſe and perfection of them*; And that the *Captain* and other *Commanders* of the Company, at their *ſeverall times of exerciſing, conſtantly put in practiſe the ſaid Armes*, which I doubt not, but will be found very advantagious to his Majeſties ſervice.

Cecill Houſe, Martii 3. 1637.

WIMBALDON.

Chap. 113. *Of the Half-pike, how it may be ſerviceable on all forms: with ſeverall figures, indifferently uſefull to Half-pike or Reſt.*

THe *Muſquet* and *Half-pike*, having thus vindicated its reputation, it were needleſſe to ſpeak further to it: although much more might bee ſaid to good purpoſe, in the further *Approbation* thereof. Nevertheleſſe being that as yet, it hath not bin ſeen by his *Majeſty*, and his *Councell of War*: and till then it can receive no generall allowance; the *uſe* thereof for the preſent, being only for *voluntary Companies*, and ſuch other *Gentlemen, that practice the experiment for the good of the Kingdom*, Therefore I muſt entreat my loving friends at the preſent to accept of the *Poſtures* of the *Muſquet* and *Half-pike*; and hold me excuſed that I doe not inlarge my ſelfe in diſcourſing the *motions forms* and *figures* moſt proper to that weapon: ſeeing I hope before it be long the uſe thereof being perceived, will be enjoyned by authority, and then God willing, I will write ſomething for the *Muſquet* and *Half-pike* by it ſelfe. And now wee will proceed to the *Poſtures*, ſuppoſing our *Muſquettiers* to come ready *charged* and *ſhouldred* into the *field*, and from thence, make the entrance upon our *Poſtures* of the *Muſquets and Half-pikes*.

The *Carriage* of the *Half-pike* upon a *march*, may be uſefull theſe foure ſeverall wayes.

Viz. The *Muſquets* being ſhouldred, the *Half-pikes*. { *Advanced.* *Ordered.* *Comported.* *Trailed.*

1. *A full Body of Muſquettiers marching with Half-pikes advanced, is glorious to behold to our friends: Terrible to be ſeen of our enemies.*

2. *Marching with Half-pikes ordered, is no other but as a ſtaffe to eaſe you in your march; or as you uſe the Reſt marching in the right hand.*

3. *Comporting your Half-pikes marching, is to be underſtood, when you march under Trees, or ſome ſuch place where they cannot be ordered or advanced.*

4. *Trayling your Half-pikes is at ſuch time as you march through low woods, and brickets, when the Half-pikes can neither be advanced, ordered, nor comported.*

Being come to the place where you mean to ſhew the *poſtures* and *motions* of the *Muſquet*, joyned with the *Half-pike*. Firſt, take the *Half-pikes* into the *left hand* with the *Muſquet*. Then

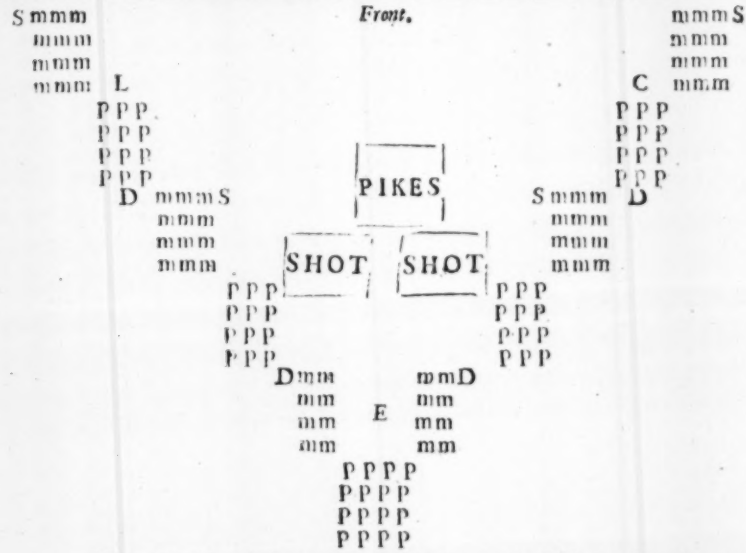
Vnſhoulder your Muſquets, and poiſe.
Ioyne your Half-pike to your Muſquets.
Pitch your Arms.
If the wind be high, then
*Sinke your Muskets down to your * deviſe*
In caſe of ſhowres, or raine,
Reverſe your Muſquets,
Recover your Muskets and Half-pikes;
Draw forth your match,
Blow your Cole,
Cock your / *Fit you* } Match.
Guard your pan,
Blow the aſhes from your coale,
Open your pan,
Preſent upon your Half-pike,

* Which moſt call a Ketch.

Gige

Give fire breaſt high;
Diſmount, joynting your Half-pike to the outſide of your Muſquet:
Vncock and return your match,
Cleare
Prime } Your pan,
Shut
Caſt off your looſe cornes.
Blow off your looſe cornes, and bring about your Muſquets and Half-pikes to your left ſides;
Sink your Muſquets upon your Half-pikes,
Charge with powder,
Draw forth
Shorten---- } Your Scouringſtick.
Charge with bullet, and put your ſcouringſtick into your Muſquet;
Ram home your charge,
With-draw,
Shorten, } Your Scouringſtick.
Return,
Bring forward your Muſquets and half-pikes;
Riſe your Muſquets into your Reſts,
Ground your half pikes for the horſe,
Draw forth,
Cock------- } Your Match.
Blow, open, and preſent, either in ſingle rank two, three, or foure ranks together,
Give fire all together.

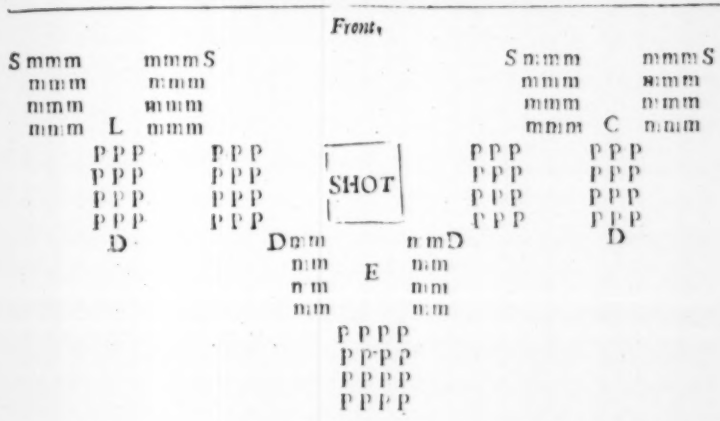
Now having ended the *poſtures*, for matter of *firings*, *forms*, *and figures of Battell*; there is none in all the Book, but is *uſefull*, one way or other, for the *Halfe pike*: either in the way of a *Reſt*, or a *Halfe-pike*, or of a *Palliſado*, and ſo may be *uſed* accordingly; but I have too long held you in diſcourſe, proceed wee now, to demonſtrate ſome more *formes*, the which may be *indifferently uſefull*, either for *Half-pikes or Reſts*, &c. Firſt, Command, *Wheel your Flanks into the Front*. and then *face as before*, this brings all the *Muſquettiers* in the *Front*. Secondly, Command the *foure innermoſt files* (as well Muſquets as Pikes) *to ſtand, the reſt of the body to face to the right and left, and move until there bee intervals made ſufficient to receive the Muſquettiers of the ſtanding part, then ſtand, and face as before.* Thirdly, Command the *three outermoſt files of each flanke to move, and leave intervals as aforeſaid.* Fourthly, Command the *Middle diviſion ſtand, the other diviſions move forwards, till their Rer be advanced even with the Front-Angle of the ſtanding part.* Fifthly, Command the *two outmoſt diviſions move forwards, placing their Rer as aforeſaid.* Laſtly, Command the *Muſquettiers to face outward, and move cleare of their whole pikes, then face as before, and ground their Halfe-pikes* as in the following *Figure.*



When this *Figure is drawne*, if your Muskettiers be *Reſt-men*, then they may *fire*, and fall in the *Reer* of their *own diviſions*. Secondly, They may *give fire*, and *flank* their Pikes. Thirdly, They may *give fire* and *place* themſelves in the *Reer* of their Pikes, &c. If your *ſhot* be Muskettiers with *Half-pikes*; Then if there be any feare of the *Horſe*, cauſe them to *ground* their *Half-pikes*, in the *form* they now ſtand: the which being performed, they may *give fire* at diſcretion, either by *ſingle Ranks*, by *two*, *three*, or *foure Ranks* together: having *fired* they may either *face about*, and move out of the Horſe-mans ſhot, untill they are ready againe, or they may place themſelves *behind their Pikes*, according to the former directions for the *Reſt*, &c. If at any time the *Horſe* chance to find the Muskettier *unprovided*; that is, take him in the time hee is *charging*, before he is *ready*. Then *three* or * *foure* of the *former ranks of ſhot*, *may couch with their* Half-pikes, (*the one end againſt the ground*, *the other breſt-high*) *holding it Palliſado wiſe in the left hand*, *their ſwords drawne in the right*, in this *manner* keeping off the *Horſe*. The *Reer-half-file* of Muskettiers; in the meane time having *made ready*, may ſecurely *foure out their ſhot upon the Horſe*, either by *ſingle Rank*, or by *two Ranks* together, which the *Horſe* are not able *long to endure*. Having *given fire* ſo often as you pleaſe on this *Figure*. Command *the formoſt diviſion of* Muskettiers *on each wing*, *to face about and move*, *untill they range even with the next diviſions of* Muskets *then ſtand*, *and face as before*. Next, Command the *two formoſt diviſions of* Pikes *face about*, *and move untill their Front range even with the Reer-Angles of the two Front-diviſions of* Muskettiers, then *face as before*; and it produceth this following *Figure*.

* *Foure ranks of half-pikes in this manner charged, are ſtronger then ſix ranks of whole pikes charged ouer land.*

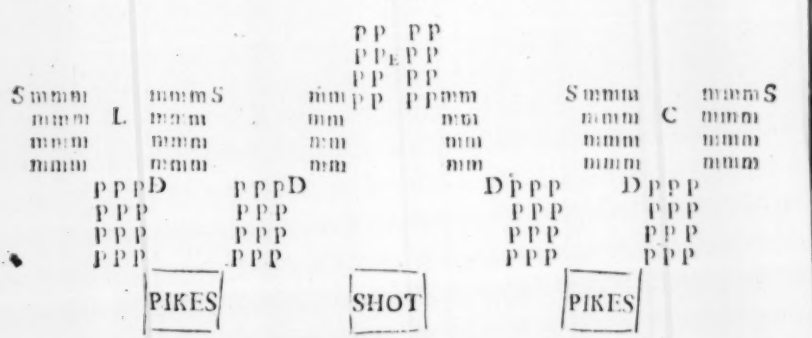
Front.



When you have well perused this *Figure*, you will perceive that each *Battell*, *Manniple*, or *Division* stands well ordered and prepared for *Fight*, if any part happen to be distressed, the other may readily move forwards to their relefe, or they retreat without incumbering one another, for the wayes to give *fire* on this forme, there are so many, that it were pitty to describe any, for they may *fire*, *advancing*, *standing*, or *retreating*. They may also *give fire* and keepe their *Figure*, the Musketiers moving forwards, and maintaining the same ground, flanking their Pikes, or falling in the *Reer* of the Pikes. If your *shot* be halfe pike-men, then they may doe all this and more, for after that they have grounded their halfe pikes (if there be any such need) they may give *fire*, and retreat by passing downe into the *intervals* (behind them) keeping themselves secure from the *Horsemans shot* untill they have made ready againe, for the halfe-pikes sticking in the ground (Pallisado-wise) *rank* after *ranke*, the *intervals* are safely enough blocke up. They may also having poured on their *shot*, fall behind their owne *Divisions* of Pikes; this being done, and the Muskettiers made ready againe, then they may give fire by * *extraduction*, the Pikes *porting* over them, &c. Let not the easinesse of the making, nor the apnesse of varying from one forme into another any way disparage the worke, for those *Figures* that are best for service, and ordered with most facility are ever to be preferred with some little alteration. Proceed we to a third *figure*, for the making whereof, command the *two reer-divisions of* Muskettiers *to move forwards, and range even a-breast with the other Divisions of* Muskettiers. Secondly, command the *Reer-division* (*or Battell*) *of* Pikes *to move forwards untill the reer range even with the* Muskettiers *that moved last before them.* The Figure followeth.

* *Of extraduction looke back into Chapter* 80.

Front.



Concerning *firings* what have beene ſaid of the former *Figures*, may in like manner be performed on this; therefore not to ſpend more time about it, we will come to the *Reducement*. And to that purpoſe firſt command the *Front Diviſion of* Pikes *face about and move even with the other Diviſions of* Pikes, then *ſtand, and face as before*. Secondly, command all the *diviſions* (*as well* Musketiers *as* Pikes) *to face to the right and left inward, and to cloſe together into one body*, this done, next command them, *wheele their Rere into the midſt* (or *flanks into the Reere*. Laſtly, all being *faced to the proper front, they are Reduced as at firſt*. I might have further inlarged my ſelfe upon this ſubject of *firings* and *figures* of *Battell*, and have ſhewed variety enough of formes, either *Regimentall* or for private and ſingle *Companies*, as *Trine Battells, Round Battells*, the *Croſſe* and *Round* in one, the *Solid ſquare impaled* with infinite others; But I have advanced farther already then I at firſt intended, though well I hope no further then will be freely and lovingly accepted; which if it be, I ſhall conceive my ſelfe to have received a gratefull and moſt ample ſatisfaction. The hope whereof doth ſomewhat incourage me to proceed a little further. And as I have already ſhewed divers and ſeverall motions with a large addition of formes and figures of *Battell*; yea, and in all (or the moſt part of them) I have not onely given the words of *Command* and *Direction* to produce them from the ordinary *Square*, but alſo together with the demonſtration of the figure and direction for the *firing*, I have in like manner given them proper Directions for their *Reducements* againe. So now for the ſatisfaction of ſome of the quainter ſort of *Souldiers*, give me leave to adde one *figure* unto another, untill that by *Firings I Reduce Firings*. For the performance whereof, that I may obſerve ſome *method*, I will *digeſt* them into the way of *exerciſe*, &c.

The Reducement.

Nevertheleſſe, before I come to that, give me leave in one word to ſatisfie many, whoſe importunity would have preſt me to have writ ſomething for the exerciſe of the Cavelry. For my owne part, I ſhould thinke it a great deale of labour ſpent to little purpoſe therein, ſeeing ſuch Gentlemen that are deſirous of information that way, may buy that excellent Booke intituled *Military Inſtructions*

Instructions for the Cavelry, set forth by that worthy and well-knowing Gentleman Captaine *John Cruso* of *Norwich*; Wherein the meanest *Cavalier* may gaine knowledge, and the best may review and supervise the Idea of his owne experiments.

Chap. 114. *The first dayes Exercise.*

HAving brought your *Company* into a place convenient where you intend to exercise them, if you have time enough, you may cause the *File-leaders*, *Corporals*, or *Serjeants*, to instruct them in the * Postures and true using of their *Armes*. Wherein having spent some time to the benefit of the Company, upon the ‡ Summons of the *Drum* each *file-leader* with his *file* is to march into his place. The Captaine or other Commander, being at the head of his Company, commands them to *even their ranks and to straiten their files*, and *stand to their order both in Rank and File*. If ‡ your *Ensigne* be not already in the *field*, but in some place neare at hand, then cause your two *innermost files* of Pikes to advance, commanding a *Serjeant* with a *Drum* to *troop* them along to the place of *Rendezvouz*, there to fetch their *Colours*. If the place be not nigh at hand take as many *files* of Musketiers. Having ‡ brought the *Ensigne* to the head of the Pikes, each *file* returnes into his place, the Officers likewise withdrawing to their severall stations. * *Silence* being commanded, the *Captaine* or other Commander, begins ‡ first to instruct the Souldiers in the severall distances betwixt *ranke* and *file*, with the wayes to open and close to them. And if he think fit, to instruct them in the severall uses of each *distance*.

Next after *distance*, they are to be instructed in the * *facings*, then in the *doublings*; next in the *Counter-marches*; and lastly, in *wheeling*. In each of which they are to be instructed according to the opportunity of the time and place, but especially the capacity of the Souldier is to be observed. Wherein the *Captaine* may doe very well in each of the *motions* to lay downe some speciall *rules* and *observations*, by which the Souldier may the better understand what he is to doe, and how (the best way) to performe it.

☜ After the *motions* ended, let them prepare for *skirmish*. And first you may cause them to *give fire* with *forlorn files*, *marching* forth twenty *paces* (or thereabouts) before the *Front*. Having all *fired over* that way they may *give fire once over*, by *advancing* two *ranks* together ten paces before the *Front*. Then let them *give fire* even with the *front*, and then with the *halfe-files*; the Pikes *parting* or *charging*, according to discretions The Pikes being *advanced* and the Musketiers *marched up*, *even* with their *Front*, you may either ✋ *face about*, *wheele about*, or *Counter-march*, and so *give fire* in the *Reer*. Your Pikes then being *shouldered*. After your Musketiers having *fired over* in the *Reer*, you may

* *It is very necessary still so often as time will permit to instruct the Souldiers in the postures and the well handling of their Armes.*

‡ *Each file-leader to leade up his file upon the first Summons of the Drum.*

‡ *Ever to observe to be even in Ranke and strait in File and stand at the true distance.*

‡ *Fetching the Ensign to the head of the Company.*

* *Souldiers ought to be very silent.* ‡ *First, the Souldiers ought to have their due distance given them, with directions how most properly to performe.* * *Facings, Doublings, Counter-marches, and Wheelings, wherin the Souldier ought treatably to be instructed, the Comander alwaies observing what his Souldiers are he hath to deale withall, and to give his directions accordingly. Never striving to put more into the Bottle then it can conveniently hold.* ☜ *Observe to march between each firing and upon each figure that may be convenient.* ✋ *Face about, or wheele about, for to counter-march if any enemy be neer is very dangerous.*

(if

(if you please) * wheele your flanks into the front and so charge Pikes to the reer. Which done, wheel your front into the midst, passe into your place, and face them to you. Then (if you will) you may passe your Musketiers of the left flank through between the ranks of Pikes, and place them next to the right flank of Pikes, opening the right flank of Musketiers to give them way. Then let the ‡ Pikes shoulder, and Musketiers give fire to the right upon a march, their leaders leading them up between the Pikes and their owne Divisions of Musketiers. Having fired once over in this way, let them continue their firing to the right, each leader leading up his file on the out side of the left flank of Pikes. Then ‡ let the Pikes advance even whilst the last file is giving fire, and so soon as the Pikes are cleare of the Musketiers, let them face all to the right and charge. Having advanced your Pikes and faced your Body againe to the left, you may then wheel your Battell about to the right, and then facing the whole Body to the left the Musketiers will be all in Front. Then let your Musketiers give fire and wheele all off to the right, the Officers to that end making ‡ an Intervall for the left flanke, or else let them wheel off by Division, placing themselves in the Reer of their owne Divisions of Musketiers. Having given fire once, or oftner, over that way, let them give fire againe, and wheele off by division, ranking even with their Pikes. That being done, cause the Pikes to charge, the Musketiers giving fire once over on that Figure. The Pikes being advanced, face the whole Body to the right, and cause the Musketiers to stand, and the Pikes to open to the right and left, and so to make ‡ the hollow square. Then you may (if you please) Command the Ensigne to display his Colours in the midst of the hollow, in signe of triumph, the Body either standing or marching. After which, command the Pikes to close their Divisions; which being performed, command the Reer division of Muskettiers, to double their front of Pikes by division, and then they will stand in forme of Captaine Wallers Triple firing; Let them give fire upon that Figure and fall off againe, according to the directions upon that Figure. Which being performed and the Pikes charged and re-advanced, the body will be absolutely reduced as at the first it was before you began your firings. These firings may (with the motions) be sufficient for the first dayes Exercise. Wherefore, for this time, we will lodge our Colours, untill by the Summons of the Drum wee are called to. th to the second dayes practise.

Wheele your flanks into the front, if your Souldiers have time enough, or otherwise face to the reere, and charge Pikes.

‡ *When the Pikes shoulder the Musketiers must observe to rank even with them.*

‡ *Upon this firing, advance Pikes when there want one File of Muskettiers to give fire, and close forwards to the distance of order.*

‡ *These kind of Intervals ought to containe fixe foot in distance, upon some other occasions twelve foot is necessary.* ‡ *The hollow Square with Muskets in front and reer, Pikes on the flanks.* *Captain Wallers firing, as in Chapter 93.*

Chap. 115. *The second dayes Exercise.*

HAving brought your Souldiers the second time into the field, the Body being drawne up into the ordinary square, and every Officer vigilant in his place; the Captaine commandeth silence, with some other generall termes of observation, both for the leaders and right-hand men. Having thus commanded them (as before) to * even their ranks, and to straiten their files, he

Silence.

* *Upon all motions be sure that the Souldiers stand even in rank and file.*

proceeds

proceeds to ſhew (as formerly) the *diſtances*, the *facings*, the *doublings*, the *Counter-marches*, and the *Wheelings*, therewithall inſtructing them either in all or ſo many of them as the time will permit, and he thinks convenient. Ever (by the way) obſerving that in the Proverbe, *A thing once well done, is twice done.* That Commander that exerciſeth his *Souldiers* with good ‡ language, and ſollid reaſons, ſhall make them better proficients then he that ſhall uſe rigid termes and rough hands. After the *poſtures*, *diſtances*, and ſeverall *motions*, that which next followes for this Dayes exerciſe are *firings* and *figures* of *Battell*. So ſoon therfore as the *Drum* begins to beat a *preparative*, the Muskettiers are to begin to *make ready*.

‡ *Good words more availeable then blows, or ill language.*

And firſt, you may cauſe them to *give fire* on the * *Horne Battell*, ſtill marching *up* into their *leaders* ground, by that meanes preſerving their *Figure*.

The Muſkettiers make ready to give fire.

Secondly, let the Muskettiers *cloſe* their *diviſions* before their Pikes, and then *give fire* upon the *Demy-Hearſe Battell*; falling *off* preſently, either all to the *right*, (the one halfe *paſſing* down an *Interval*) or to the *right* and *left* by *diviſion*, and placing themſelves in the *reer* of their owne *diviſions* of Muskettiers.

* *Horne Battell, as in Chapter 75.*

Demy-Hearſe, as in Chapter 76.

The third time of their *firing*, let them *wheele off* by *diviſion* and flank their Pikes, and when they have *fired over* that way, let the Pikes *charge*.

For the fourth *firing*, let them *give fire even* with the *front* of Pikes, *wheeling off* to the *right* and *left*, and placing themſelves in the *reer* of their own *diviſions*.

Then let them *fire* even with the *halfe-files wheeling off* by *diviſion*, and placing themſelves in the *reer* of the Pikes. The Pikes (you are to underſtand) ought to charge all the time of the laſt *firing*, who being *advanced*, wheel your *Battell* about to the *right* or *left*.

Betweene each firing, cauſe your Body to march either in forme of Battalia, extended in length, or upon any other figure ſo that it may conveniently be done without diſorder.

Then your Muskettiers being in the *reer* of your Pikes, let * your fixt firing be to the *reer*; the Muskettiers *wheeling off* by *diviſion* and *placing* themſelves before the *front* of their *owne diviſions* of Muskettiers next behind the *reer* of Pikes. Having fired once over that way, let them give fire over againe and *flank* their *Pikes*, which being in like manner performed, command them to *wheele* their *flanks* into the *front*, and then *face* to the *reer*, and *charge* Pikes at the inſide of the right foot with their ſwords drawne in their *right hands*.

* *A firing in the reer.*

Let the ſeventh *firing* be diſcharged ‡ over their Pike-men, wheeling either all *off* to the *right* through *intervals*, or elſe by *diviſion*, and placing themſelves in the *reer* of their owne *files*. Otherwiſe (for want of room) the firſt *rank* of Muskettiers, having *given fire*, let them *kneele* or crouch low upon the ground, and make ready againe, the ſecond *rank* in like manner *firing* and kneeling, and ſo for the reſt. Having all *fired* once over in that manner, let the Pikes *advance*, and put up their *ſwords*, the Muskettiers in like manner are to riſe, then to even their *ranks* and ſtraiten their *files*.

‡ *In ſtead of giving fire over their Pike-men, they may give fire by extraduction, as in Chap. 80.*

For the eighth *firing*, you may face the *body* to the *reer* (or if you will continue your *firing*, the ſame way) then wheele your *Battell about*, and having *opened* your *Intervals*, your forme will be the * *broad fronted Phalange*, or *broad fronted Battell*. Let theſe *give fire* the firſt time, *falling* (or wheeling) all *off* to the *right*, *placing* themſelves in the *reer* of Pikes, of their *own diviſions* of Muske-

* *This Figure is moſt commonly called the broad-fronted Battell. But moſt properly the long-fronted Battell, for that the length is the extenſion betweene flank and flank, thus is in Chap. 81.*

ters. The *second* time of *firing*, let them *wheel* all *off* to the *right*, (as before) and *place* themselves in the *Reer* of the *Pikes*, which *follow next after* their *own divisions*. In the *Interim* of the *last two ranks firing*, cause your *Pikes* to *port*; but when the *Musketiers* are *cleared* away, the *Pikes* may *charge*.

When the *Pikes* are *advanced*, and that they have *closed* their *divisions*, for the ninth *firing*, *face* them to one of the flanks, and *wheel* them into a *Semi-circle* or * *Convex half-moon*; where the Musketiers being *outermost*, *give fire* upon that *figure*: the *first* time *falling* behind the *Musquettiers* of their *own divisions*: The second time of *firing*, cause them to *place* themselves *behind* their *Pikes*. For further *directions*, look back upon the 79. *Chapter*, which discourseth of the *Convex half-moon*. The *Pikes* may also *charge*, and the *Musquettiers give fire over again*: according to *discretion*. The Pikes being re-advanced, *face* the whole *body* to one of the flanks, and *march* them *out* Hearse-wise. Then *command* them to *double* their ranks to the *right*: which being done, *command* that flank which are Musketiers, to *double* the *contrary flank* by *division*: which being performed, all the Musketiers will be in *Front* and *Reer*. Then cause the *reer-division* of Musketiers to *double* the *front* of *Pikes* by *division*.

* *Convex half moon, as in* cap. 79.

Then let them *give fire* on that *figure*, as they may see further directions in the 93. *Chapter*. The Pikes having *charged*, and *advanced* againe.

For the eleventh *firing*, first *face* the whole *body* to the *right*: then cause the *half-files* that then are, to *face* to the *reer*; and so let the *Musketiers give fire* to the *Front* and *Reer*: *wheeling off*, by *division*, and flanking their Pikes. The Pikes may also *charge* to the *Front* and *Reer*, which being performed, *face* them all againe, to their * *leader*.

* *The leader is then conceived to stand on that part which was the Right flank; the which was the Front of the eleventh firing.*

For the twelfth *firing*, make the *Plinthyum* or *foure-fronted-Battell*: the *Angles* whereof being filled with Musketiers. For further *satisfaction*, look upon *Chap.* 102. which gives *direction*, both for the *motion* and *reducing* thereof. Next *face* the whole *body* to that part which was the *Front*, before the *last firing* began. Then, if you would have your *Ensigne* to *display*, in an *hollow Square*, cause your *Musketiers* to *stand*, and *half-files* of *Pikes*, to *face* to the *Reer*: and so both *divisions* of *Pikes* to *march*, untill their *last ranks* are *even* with the *Front* and *Reer* of *Musketiers*. Then *face* all to their *leader*. If you please, the Musketiers may *give fire* upon this *hollow Square*, as they *march*, to *both flanks*: still *leading* up their *files*, on the *inside* of their *own divisions*, and this will make the 13. *firing*.

But by this time, our *powder* being *spent*, our *men weary*, and *night* approaching: We will come to *reducement*. Wherefore, first cause the *Pikes* to *close* their *divisions*, and the *Musketiers* to *march up*, *even* with their *Front* of *Pikes*. Then let the *whole body*, *wheel* their *flanks* into the *Reer*, which being done, all the *Musketiers* will be in the *Reer*. Then (if you will) *face* to the *Reer*, and *give fire*, causing your *Musketiers* to *wheel* off by *division*, and to flank their *Pikes*. Or else, cause your *Musketiers* to *open* to the *right* and *left*; and *double* your *Front* of *Pikes*, by *division*. Which being done, *double files* to the *left*; and they will be all *reduced* as at first. Wherefore, wee will now *lodge our Colours*, and conclude our *second daies exercise*.

Chap

Chap. 116. *The third daies Exerciſe.*

HAving the third time (as formerly) brought your *Souldiers* into the *Field*; it is very neceſſary, in the firſt place, that they bee taught the *Poſtures* of each *Armes*; either by the *File-leaders*, or ſome other of the *Officers*. Wherein they muſt be carefull, to inſtruct them in the *firings*, both to *Front*, *Rear*, and *Flanks*. As to *give fire* to the *Front*, *advancing*; to *give fire* to the *Front*, upon a *ſtand*: to *give fire* to the *Rear*, upon a *march*: to *fire* to *either Flank*; *marching* or *ſtanding*. As alſo to inſtruct them in *diſtances*, *facings*, *doublings*, *countermarches*, and *wheelings*; that ſo, they may bee the more *apt* and *capable*, when they ſhall be brought into a *body*. Having ſpent ſome time in the *exerciſing* of *Files*, let the *Drum ſummon* each *File-leader* to his place; the *Enſigne* bee fetcht to the *head* of the *Company*; the *Captain* command *ſilence*; and the *Souldiers* tender *obedience*. The *Ranks* being *evened*, and the *Files ſtrauned*, the *Captain* (according to his accuſtomed manner) begins to inſtruct them in the *Diſtances* and *Motions*. And after the performance of ſo many of them, as hee ſhall think fit for the preſent exerciſe, he commands the *Drummes* to *beat*, and *Muſkettiers* to *make ready*; and ſo cauſeth them to *give fire*, * three or foure ſeverall wayes, after the ordinary manner of *firing* in the Front.

Whoſoever it be that teacheth the poſtures of the Muſket; ought to be very diligent in his inſtruction, concerning the well managing of theſe Armes: that they may not only fire to the Front, Rear and Flank; but that they obſerve order in their motion, which will better their execution. The File-leader of he have time, may inſtruct his File in the diſtances, and the ſeverall motions.

Then cauſe your Muskettiers of the *left flank*, to *give fire* to the *Rear*; and the Muskettiers of the *right flank* to *give fire* to the *right*. This *firing* is to be performed upon a *march*, the Pikes ſhouldred.

For the ſecond *firing*, let them give fire to both *flanks*. The ‡ *gathering firing*.

For the third *firing*, let them fire to both *flanks*, *drawing* them *up* between the *diviſions* of Muskettiers and Pikes.

For the fourth *firing*, let them give fire againe, to both *flanks*, leading them up after they have fired, between the ‡ midſt of Pikes. When the laſt files are firing, advance your Pikes, and cloſe your *ranks* forwards to their order. Then *face* to the *right* and *left*, and *charge* Pikes. Your Pikes being advanced, and *faced* againe to the Front proper: all your Muskettiers will be the *midſt*.

Then, open them ſome *Intervals*; and let the fifth firing bee to the *Front*, *wheeling all off* to the * *right*, and placing themſelves in the *Rear* of their owne diviſions. Then cauſe the Pikes to *charge*, and when your Pikes are advanced againe, let your halfe-files face about to the *right*.

And ſo the ſixth *firing* may be to the *Front* and *Rear*; the Muskettiers of the Front diviſion, *wheeling* off to the *right*: thoſe of the Reer diviſion, *wheeling* off to the *left*: either of them placing themſelves in the *Rear* of their own diviſions. The Muskettiers having fired once or twice over, *wheel* your *flanks* into the Front and Reer, and cauſe your Pikes to *charge* to the Front and Reer. The Pikes being againe advanced, and *faced* to their former Front, *wheel* Front and Reer into both *Flanks*, and face as before.

* *By drawing forth of looſe files, or otherwiſe.* ‡ *The gathering, firing, as in Chapter* 83. ‡ *Drawing up the Muſkettiers between the Pikes, as in Chapter* 87. * *As in Chapter* 101.

For the ſeventh *firing*, make the *Plinthyum, or foure *fronted Battell*, the *Angles* being filled with Pikes: and let them give fire, and *charge* their Pikes, according to directions for that figure. As likewiſe the firing being ended, *reduce* the men back into their places, as they were before this firing began. Then *wheel* off your *Front* by *diviſion*, which brings your Muskettiers upon the *flanks*; but doth not *reduce* your men juſtly into their places, if your *number* be any thing great.

*The Plinthyum is in Chapter 102.

From thence, make them a perfect ‡ *croſſe battell*, and let your Muskettiers give fire, *wheeling* all *off* to the *right*, placing themſelves in the *Reer* of their owne *diviſions* of Muskettiers.

‡ *The Croſſe Battell, as in Chapter 99.*

For the ninth *firing*, let them give fire as before; but place themſelves in the *Reer* of their Pikes; the Pikes *moving forwards* into their *ground*, and *charging*. Having advanced your *Pikes*, command your *flank diviſions* to *face* about to the *right*, and to cloſe their *diviſions*. Then command the *Front* and *Reer diviſions* to *wheel* their *flanks* into the *Reer*: which being done, *face* then to the *Front proper*, (that is) after the *right file-leaders*.

For the tenth *firing*, (your Muskettiers being ſtill in the *midſt*) let them give fire by ‡ *Introduction* twice over, (ſtill beginning with the ſecond *rank*) the Pikes moving ſoftly forward.

‡ *Introduction, as in Chapter 77.*

For the eleventh *firing*, let them give fire by *Introduction*, (beginning with the *bringers up*) The Pikes may *charge* at diſcretion: then let the Muskettiers ſtand, and the Pikes *march* forwards, cloſing their diviſions before the Muſkettiers.

And ſo let the twelfth *firing* be by way of *extraduction*. Let the Pikes *charge*; which being performed, command the *firſt* and *laſt* foure *ranks* to *ſtand*; and the reſt of the *body* to *face* to the *right* and *left*, and ſo to move untill they are cleare of the *ſtanding ranks*. Then let the whole *body face about* to the *right*, and let the *Enſigne* diſplay his *colours* in the *midſt*, the *body ſtanding* in this following *forme*.

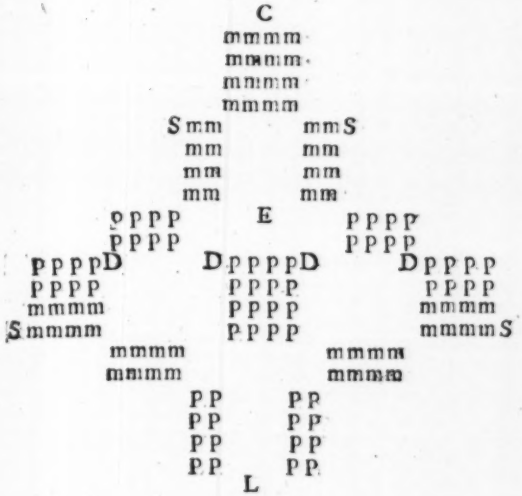
This firing is demonſtrated in Chapter 80.

The

The Muskettiers now being formoſt, let the thirteenth be a Triple firing to the *front*, having fired, let them wheele off to the *right and left*, the *front* Diviſions falling in the *reer* of themſelves, the *flanke* Diviſions in the *reer* of their Pikes, they moving forwards and maintaining the Muskettiers *ground*. The Pikes on the *flanks* may *charge*, the Muskettiers of the *front* Diviſion had need be *halfe Pike-men*, that ſo they may defend themſelves from the *Horſe*.

For the fourteenth firing make the *Crown-battell*, for the produce whereof obſerve theſe following *directions*. Firſt, command the *foure middlemoſt ranks of the flanke diviſions, Face to the right and left outward, and move cleare of the ſtanding parts*. Secondly, command the *foure innermoſt files of the front and reer diviſions to move forwards untill they ſtand cleare of the ſame Armes*. This being rightly performed, this following *Figure* will be produced.

Front.

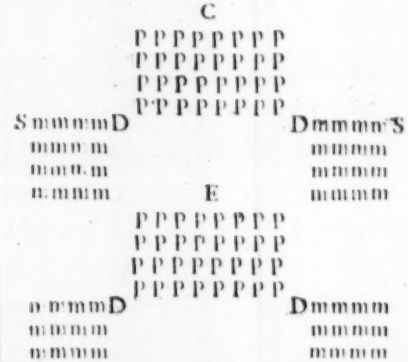


Reere.

In this forme you may *give fire* to the *front*, or to the *front* and *reer* at diſcretion, having performed what you hold requiſite on this *Figure*, cloſe the *diviſions* back again into their places, (that done) *face* the two *flank diviſions* to the *right* and *left inward*, and let them *cloſe* in like manner. This makes your *body* 16 deep, four *ranks* of Muskets and four *ranks* of *Pikes*, then four other *ranks* of ſhot, and four of the contrary *Armes*. Next, *wheele off your front by diviſion*, and *cloſe them* againe, this nothing altereth the *forme*, but only brings the inſide outward. *Or wheele your Front inward to the Reere.*

For the fifteenth firing, firſt command the *Muskettiers* to *face to the right and left*

left outward, and move cleare off the Pikes, then *stand*, and the *whole body face about to the right*, the *Captaine* going to the head of his *Pikes* shall there find all his proper *file-leaders* faced towards him, and the whole *body* in this following forme.



The Redusement.

Let the Musketiers *give fire* to the *Reer*, and *both flanks marching*. They may give fire and keep their Figure, or they may give fire and sauk their *Pikes*. If the latter, then command the *reer divisions close forward*, and all is *reduced* as at the first. If the former, then all the *Divisions* are to *close forwards*.

And herewith we will conclude our *third dayes Exercise* and *lodge* our *Colours*, until that the bellowing *Drum* call us the fourth time into the *field*, to give an account of our proficiency. Till when, wee will leave our *Souldiers* to repaire to their *Quarters*, refit their *lunks*, refresh their *spirits*, and replenish their *Bandiliers*.

Chap. 117. *The fourth dayes Exercise.*

HAving the fourth time brought your *Souldiers* into the *field*, and (as formerly) caused them to be instructed in the Postures (both of *Musket* and *Pike*) that so they may be capable to use them both with *agility*, and with *safety*. As likewise taught them their divers wayes of *distance*, with the severall and various *motions*, not forgetting particularly to instruct them with *rules* and pertinent *reasons* to every one of them; that so they may, not onely learne, but like rationall men understand what they doe. Which being deliberately performed, and each Officer disposed to his severall *place*, the Ranks being *evened*, and the Files *streighted*, the Captaine *commands*, the *Drum beats*, and the Musketiers make *ready* for skirmish, &c.

The

The firſt firing, being by drawing forth the innermoſt *files* of each *flank* of Muſketiers, to the *right* and *left* obliquely before the *Front*, and ſo to ſtand and give *fire*. Having given fire, let the bringers *up* lead them back into their *places*. And in the meane time, let the next innermoſt *files* lead forth and *fire*, after the ſame manner, and ſo likewiſe the reſt, untill all the Muſketiers have *fired* once over that way.

You may either draw forth the innermoſt or outermoſt at diſcretion.

For the ſecond firing, let them give *fire obliquely*, and croſſe the *Front* both at once.

For the third, let them give *fire obliquely*, the Muſketiers ſtanding before the Pikes in forme of an *hollow wedge*. Upon this firing the Muſketiers fire *outward*, whereas in the other they fire *inward*.

As in Chap. 96.

For the fourth firing, let em *fire* upon the oblique W. For the manner of theſe firings, with the wayes both how to *make* them and *reduce* them, I refer you to their ſeverall places where I have ſhewne them plainly.

As in Chap. 97.

For the fifth firing, let them give *fire obliquely* on the *fort-battell*, that is to ſay, to *front*, *reer*, and *flanks*. Theſe *oblique* firings howſoever that ſome of them may at ſometimes be uſefull, yet here they are inſerted but for variety of exerciſe, and no otherwiſe to be accounted of. In all theſe oblique firings the Pikes never come to *charge*, but ſtand either in a *hollow* or ſollid *ſquare* in danger of the Enemies *ſhot*, themſelves neither being able to *offend* the Enemy, nor to *defend* themſelves. And yet if by frequent practiſe they were inured to the uſe of the long *bow faſtned* to their Pikes; I make no queſtion, but that when they ſhould become expert in the uſe of the *Bow* and *Pike*, they would not only be a terrour to their Enemies by the continuall ſhowres of *Arrowes* which they would ſend amongſt them, but alſo they would be a great meanes to rout their *battalions*, and utterly breake their *order*. On the contrary, if men ſhould be put to uſe the *Bow* and *Pike*, and have not firſt well learned the uſe of the *Pike* alone, they would be ſo cumberſome to themſelves, and ſo troubleſome to others, that inſtead of ſpoyling their Enemies they would rout themſelves. But pardon this digreſſion whileſt I proceed to the reſt of this *dayes Exerciſe*.

Expert Bow-pikemen may be very ſerviceable.

The ſixth firing, being in * forme of a Roman T. is to be made as followeth. Let the Pikes *ſtand*, and the *flanks* of Muſketiers wheele into the *front*, then let them give *fire*, making an *Interval* upon each *flanke*, the Muſketiers of the right *flank* wheeling off to the *right*, the Muſketiers of the left *flank* to the *left* and placing themſelves in the *Reer* of their own *diviſions*. When the Muſketiers have *fired* once or twice over, let the Pikes paſſe through and wheele their *front* into the midſt, and then facing to the *front* let them charge their Pikes; and from thence having *advanced* their Pikes, let the *Commander* paſſe to the *right flank* and face the whole *Body* to the *right*. Then wheele the *battell about* to the *left*, untill the *body* be brought into a *round battell*, from whence wee will begin the ſeventh *firing*.

* *In this form it the Muskets ground their half-pikes, and the Pikes open to the right and left to the outmoſt Angle, then the Muſketiers after that they have fired may retreat to the reer of the Pikes whilſt they charge to the flanks.*

The *Figure* being made, *face* the whole *body* to the *Center*, and give them their directions what they have to doe. When they have received their inſtructions, let them all *face about* to the *right*, *preſent*, and *give fire*.

The *firſt* time of their *firing*, placing themſelves in the *reer* of their owne Muſketiers.

The

A quaint Reducement for a knowing Company; but not for a large or ignorant number.

The ſecond *firing*, countermarching to the *right*, and placing themſelves in the *Rear* of the *Pikes*, the *Pikes* at the ſame time, are to *move* forwards into the Muſkettiers ground; where they may *charge over-hand*, and (if need be) at the *foot*; the *Muſkettiers giving fire* over them, as in the *Convex halfe-moon*. The *firing* being ended, and the *Pikes* advanced, let the *Commander march* forth of the *round battell*: at that part where he ſhall find all his *proper file-leaders*. Then let the whole *body* be *faced* to that part and the file-leaders cauſed to *march forth*, even *a-breaſt*, the *Muſkettiers* and *Pike-men* following their *leaders*, and *marching* untill the *body* have attained their *orderly ſquare* againe. But note, that all your *Muſkettiers* are in the *midſt* of the *battell*.

The eighth firing is the impaled ſolid ſquare.

For the eighth *firing*, make the *impaled ſolid ſquare*: the way to performe it is as followeth.

Your *Pikes* being now the *flankers*, *draw forth the meitie* of the *files* of *Pike-men* from the *right flank*, croſſe the *front* of the *body* (taking the *outmoſt files*) let *half* the *files* of *Pike-men* of the *left flank*, be *drawn croſſe* the *Rear*, following their *bringers up*.

Then, *face* all your Muſkettiers to the *Front*, *Rear*, and *Flanks*. The Pikes may *charge* all *over-hand*: and (if need be) at the *foot* with their *ſwords drawne*: the *Muſquettiers firing* over them. Having *fired*, *charged*, and *advanced* their Pikes, *draw off* the Pikes againe, from the *Front* and *Rear*, into their *places*.

The hollow-fronted Croſſe, the Muſquets making the hollow, is demonſtrated in cap. 100.

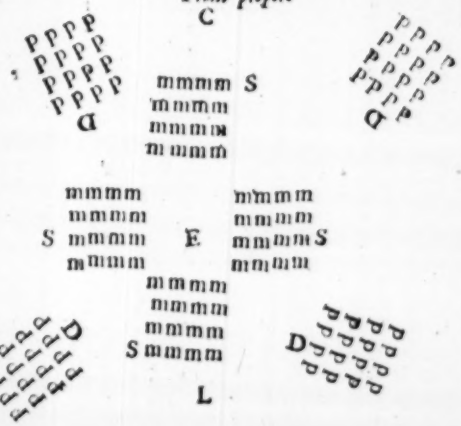
For the ninth *firing* (the Musketiers being ſtill in the *middle*) make the *hollow fronted-croſſe-battell*: the Pike-men making the *hollow*, upon the flanks of the Musketiers. For the making whereof, *wheel* the *Front* of the two firſt *Ranks*, into the *midſt*. That being done, *wheel* the *Rear* of the two laſt *Ranks*, after the ſame manner: and then *face* the reſt of the *body* to the *right* and *left*, and cauſe them to march untill there be a *ſquare hollow in the midſt* of the *battell*; then *command* them to face to the *Front*, *Rear*, and *Flanks*, which being in like manner performed, cauſe the *Pikes* (who are now in the *Front* of the *Muſkettiers*) to *open* to the *right* and *left*; the *laſt ranke* of *Pikes ranking even* with the *firſt rank* of *Muſkettiers*. The *Muſkettiers* may *give fire* upon this *Figure*, *wheeling* all *off* to the *right*: and *placing* themſelves in the *Rear* of their owne *diviſions* of *Muſquettiers*. If need be the *Pikes* may *charge* to the *Angle*, whilſt the Muskettiers give fire ſtraight forwards. This being done, and the Pikes againe advanced; for the tenth figure make the *quintupled hollow ſquare*, by commanding the two *firſt ranks* of *Muſquettiers* of *each diviſion*, *move forwards cleer of the Pikes*, which produceth this following *Figure*.

When

When you would come to *firing* cause the Musketiers in the *midst* to *close to the front, reer, and flanks*, and so they may give fire accordingly. The first *firing* the Musketiers may *make good their ground*, the second time of *firing* over, they are to *rank even* with the *Pikes*; the third time of *firing*, the *Pikes* move a little *forward*, and the *Musketiers* lose ground: which brings them againe into the *hollow fronted crosse*; all the while the Musketiers are giving *fire*, the Pikes are to *port* and charge to the *Angles*. Having *advanced* your *Pikes*, Command them to close their *divisions* before the *Musquetiers*, that done: Command all the *Pikes*, to *face to the right, and move into the space between the Angles of the Musketiers*, which produceth this following *Figure* from whence we will make our eleventh firing.

When the Musketiers first give fire, they will stand in the form of a hollow Diamond: I forbeare the figure, it may easily be conceived.

Front proper.



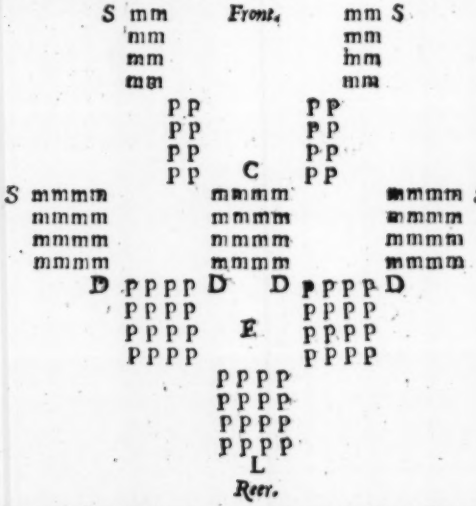
The eleventh firing.

On this *double croſſe* battell, you may if you pleaſe *give fire* to the *Front, Reers,* and *Flanks*: it is an excellent *figure* for Muskettiers with *Half-pikes*, for that they may move forwards and *ground their Half-pikes*, and then give fire, *one, two, three*, or *foure ranks* together wheeling off, and *maintaining* the *place* where their *Half-pikes* are *grounded* (*Palliſado-wiſe*) or they may *fire and retreat* into this *figure* and there make ready and fire again: the Pikes may charge, &c.

When the *Pikes* are againe advanced, let them move to the left into their places before the *Muskettiers* and the whole body face to the Front.

To make the twelfth *figure*, firſt Command the *Muſquettiers of the flank diviſions to interchange ground with their Pikes, and then to move forwards, untill the Reer be advanced, even with the Front Angle, of their owne Pikes.* Secondly, Command the *Muſquettiers of the Front diviſion*, to *ſleeve up to the right and left of their Pikes.* Thirdly, Command the *Muſquets of the Reer* to *move forwards, and range even with the Muſquettiers of the flank diviſions.* Fourthly, Command the *Front diviſion* (as well Muſquets as Pikes) to *open to the right and left, leaving an intervall for the Muſquettiers behind them,* Laſtly, *cloſe the Pikes forwards in the Reer,* that their *Front* may be *even, with the Reer of the two other diviſions.* The figure followeth.

And when they be opened, let the Muskets move forwards, as in the figure.



The *body ſtanding in this figure*, the two *Front diviſions* of Muskettiers may give *fire*, once or twice over, and then flank their *Pikes*: They may *fire* againe and fall in the *Reere* of their *Pikes*. One, two, or three of the other *diviſions* of Muſquettiers may *move* forwards, and *give fire*: the two *front diviſions* of *Pikes* in the meane time charging. Having fired twice or thrice over at diſcretion the two *middle diviſions of Pikes* are to move forwards, *to*

port

port and charge; the *Musquettiers* in the mean time *firing and loosing ground*. By which meanes the *flank divisions* of Musquettiers, will againe *flank their Pikes*. Then, because we will come to *reducement*. First, Command the *middle division of Musquettiers* (the which pertaine to the *Reer*) to *move back into their places*. Secondly, Command the *two Front divisions to close together*. Thirdly, Command the Musquettiers *and* Pikes *of the flank divisions* to *interchange ground*, and then *close their divisions*. Fourthly, Command the *Front and Reer divisions to wheel their Musquettiers* into *the midst*. Lastly, *wheel off your Battell by division*, after which, having *closed* their *divisions*, they are perfectly *reduced* as at first. And herewith we will conclude this dayes *Exercise*, and lea e our *Souldiers* to rest: untill that the *morrow's Sun*, and the *thundring Drum* shall call us forth againe into the *Field*.

Chap. 118. *The fifth daies Exercise.*

HAving the fifth time brought your *Soukliers* into the *Field*, if you have leisure, it will not be amisse for to cause them to bee instructed (in the first place) in the *postures* of the *Pike* and *Musket*. For those *Souldiers* which by often practise of their *postures* are growne *perfect*, will *manage* their *Arms* with *ease*, *surety*, and *celerity*: when on the contrary, the *unpractised Souldier*, will be a *trouble* to *himself*, a *danger* to his *fellowes*, and a *dormant* to his *Enemies*.

The postures cannot be too often practised by young Souldiers.

After the *postures*, each *file* being *drawne* into his *place*; and the *Ensigne* (according to the former directions) brought to the *head* of the *Pikes*; the ranks *evened*, and the *files straitned*; the *Captain* having commanded *silence*, and delivered himself in such tearms as the present occasion doth require, ever preferring the *industrious* and *painfull*; and on the contrary, blaming the *careless* and the *slothfull*, he next proceeds to instruct them in their *severall distances*: And these, indeed are the *ground* of all *motion*: seeing that without *distance*, the *motions* can be *executed*. Next to the *distances*, they are to be instructed in the *motions*: ever observing to each *motion* his due *distance*.

Distance to the ground of motion, because no motion can properly be performed without its due distance.

Next after *postures*, *distance*, and *motion*; let the rest of the dayes *Exercise* be spent in *firings* and *figures* of *Battell*. Each *Officer* having now received his severall *Charge*: The *Captain commands*, the *Drums beat*, and the *Musketiers make ready*.

Let the *first firing* be performed by *leading forth* the *outermost file* of each *flank*, twenty or thirty *paces* before the *Front*. When being come to the place of *firing* (where they may surely doe *execution*) let them *rank foure*. That is to say, the three *men next* behind the *right-hand-file-leader*, shall rank *inward* to the *left*, *even* with their *file-leaders*: the three *next men* after the *left-hand-file-leader* *ranking inwards* to the *right*; *even a-breast* with the *leader* of their *file* the residue of each *file*, keeping themselves in file; and *closing forwards* to the *distance* of *order*, just after their *file-leaders*. The first foure of each *file* having *presented*, *fired*, *and wheeled away*; the *last foure men* (being the *Reer-half-files*) in the *interim* of their *wheeling off rank* to the *right* and *left inward*: *presenting*, *firing*, and *wheling off* (as aforesaid) and *placing* themselves in the *reer* of the *former part* of their *files*, which *wheeled away* before them. The second *files* are then to lead *forth*, and to doe the like; and so successively, the *rest*, untill they have all *fired over*, this way.

For further direction to this firing, turn to Chapter 73.

For the second firing, let the *outermost* files *lead forth* to the same distance before the *Front*; whether being come, as to the place wherein to doe their *execution*.

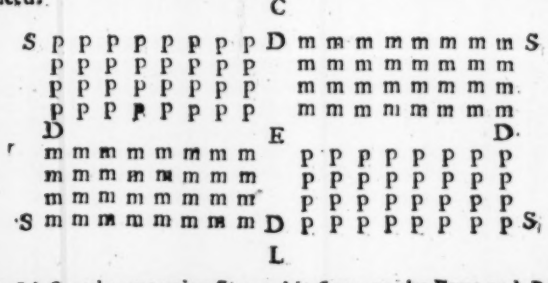
ecution, let the files rank to the *righe* and *left* inward; and ſo fire altogether: *wheeling off*, and *placing* themſelves as in the *former* firings. The reſidue of the other *files* of *Muſquettiers*, at the ſame time, *marching forth*, *giving* fire, and ſtill *placing* themſelves file-wiſe, on the *innermoſt part* of their *own diviſions* of Muſkettiers, and *nuxt* to the *out-ſide* of Pikes.

For the third firing, ſend forth the foure firſt ranks about *ten paces* before the *Front*: Let the two *firſt ranks* preſent together, the ſecond rank *cloſing forwards*, and *preſenting between the Intervals* (or ſpaces) of the firſt rank, and ſo *poure out their ſhot together*. When they have *given* fire, let the firſt *ranks*, firſt *wheel away*, the ſecond ranks following them. The *other two ranks*, *cloſing*, *preſenting*, *firing*, and *wheeling away* as aforeſaid, falling in the *Reer* of their owne *diviſions* of *Muſquettiers*. The *next foure* ranks moving forwatd, and doing the like, &c.

As in Chapter 92.

Let the fourth *firing*, be performed to both *flanks* upon a *ſtand*: *facing* the whole *body* to the *right* and *left*, there *firing*, *wheeling off* by *diviſion*, and *flanking* their Pikes. Whilſt the two laſt *ranks* are *giving fire*, let the Pikes *port*, and when the Muskettiers have *fired*, and *wheeled off*, let them *charge*.

Having advanced their *Pikes*, face the whole *body* to that part where you ſhall find your file-leaders of Muskettiers: then will all your Muskettiers be in *Front* and *Reer*. Next, Command your half-files that then are, to *double* your *Front* to the *left entire*: which being done, this following *Figure* will be produced.



This is the fifth firing.

The *Muſquettiers* may give fire on this *figure*, to the *Front* and *Reer*, or to the right and left: The firing by me intended is to both *flanks*; to which purpoſe *face the body to the right and left by diveſion*. Let the *Drum beat*, the *Muſquettiers make ready*, *preſent* and *give fire*, all *wheeling off* to the left, and placing themſelves in the *Reer of their own own diviſions*. The Pikes may alſo *port*, and *charge* as they ſee occaſion. The *Muſquettiers having all fired*, the Pikes againe *advanced*, and the whole *Company*, *faced* to their former *front*, *command* the *half-ranks* of the *right*, (both *Muſquettiers*, and *Pikes*) to *march*, and the *half-ranks* of the *left flank* to follow in the *Reer*.

Half ranks of the right or left flank, both intend the ſame thing.

Having given them ſome time of breathing, then for the ſixt firing, cauſe the *half-files* that then are, (Muskettiers and Pikes) to *face* to the *Reer*. Which being done, let the Muskettiertiers give fire to the *Front* and *Reer* upon a *ſtand*, *wheeling off* by *diviſion*, and *placing* themſelves in the *reer* of of their *Pikes*; they

The ſixt firing.

moving

moving forwards, and maintaining the Musketiers ground. The Pikes are then to *charge* when they are cleered of their Musketiers. Which being done and they againe *advanced*, *face* them all to their former *front*.

For the seventh *firing*, command *half-files* to *double* the *front* inward, *entire*. To which purpose, open the *front half-files* (both Musketiers and Pikes) to the *right* and *left*, for receiving the *halfe files* of both *Armes* within them; which being executed, each *Armes* will stand in three *divisions*, as you may perceive by this following *Figure*. *The seventh firing.*

Front.

C

S	p	p	p	p	D	m	m	m	m	m	m	m	D	p	p	p	p	S
	p	p	p	p		m	m	m	m	m	m	m	m		p	p	p	p	
	p	p	p	p		m	m	m	m	m	m	m	m		p	p	p	p	
	p	p	p	p		m	m	m	m	m	m	m	m		p	p	p	p	

E

	m	m	m	m		p	p	p	p	p	p	p	p		m	m	m	m	
	m	m	m	m		p	p	p	p	p	p	p	p		m	m	m	m	
	m	m	m	m		p	p	p	p	p	p	p	p		m	m	m	m	
S	m	m	m	m	D	p	p	p	p	p	p	p	p	D	m	m	m	m	S

L

Reer.

When you intend, to *give fire*, Command the *halfe files* to *face about*, and performe the firing to the *front* and *reer*, wheeling off by *division*, and *placing* themselves in the *rear* of their owne *divisions*. The Pikes may *charge* at discretion. Having *advanced* your Pikes and faced the whole *body* to you. Let your eighth *firing* be upon the *Checker Battell* (of eight divisions.) To make the which, command *left flank double the right flank by division*. This command being executed, the *Checker Battell* is finished, you may give *fire* upon it to the *Front*, *Reer*, and *Flanks*, either standing or marching, the Musketiers still placing themselves either after or within their owne *divisions* of like *Armes*. The Pikes may also charge, as you see occasion, &c. Many formes might be made from this *Checker Figure*, the which for the present I omit; therefore, command the first and last toure *Ranks to face to the left* and *march*, being moved cleer of the *standing* part of the *body*, let them *close their division* and *face to the front againe*, this brings them into *six divisions*. Next, command the eight innermost *files to face about and march into their places*. The *halfe-files* being *faced about*, and *marched cleer off*, then are the *front half-files* to close their *divisions*, this being performed and all rightly *faced*, the Musketiers will be in the *midst*, and the Pikes on the *Front* and *reer*. Let your ninth firing be to the *reer* and *right flank* together. And to that purpose; First, command *half-files double your Front to the right intire*; that being done, Let the *half-files that doubled wheel their Battell to the right*, and then being *faced* to the *Front*, they will stand as in this following *Figure*. *These eight inmost files are the half-files of Mukets and Pikes which doubled the Front inward intire.*

Front.

E C

S p p p p p p p p D p p p p p D m m m m S
p p p p p p p p p p p p p m m m m
p p p p p p p p p p p p p m m m m
p p p p p p p p p p p p p m m m m

m m m m m m m m p p p p m m m m
m m m m m m m m p p p p m m m m
m m m m m m m m p p p p m m m m
S m m m m m m m m D p p p p p D m m m m S

L

Reer.

As the *Body* now ſtands faced, you may conceive a firing to the *Reer* and right *Flank* marching, the which may be performed theſe two ſeverall wayes. * The Muskettiers of the *Reer* having fired, may wheele *off* to the *right*, and place themſelves next after the Pikes in the *Front* of their owne *diviſions*. The Muskettiers of the right *Flank* having at the ſame *inſtant* fired may place themſelves in the inſide of their owne *diviſions* next the Pikes. A ſecond way to place themſelves after that they have given *fire* is this, the Muskettiers which *fire* in the *Reer*, are to place themſelves before the *Front* of Pikes, the Muskettiers of the *Flank* place themſelves on the inſide of the right *Flank* of Pikes. The whole *Body* may ſtand and Pikes charge to the *Reer* and right *Flank*. If on this Figure you would *give fire* ſtanding, then face the right *flank* to the right, and left *flank* to the *Reer*, and open an *Interval* in the middle of the left *flank* for the Muskettiers to move thorow. The firſt time of their *firing* the Muskettiers may place themſelves in the *Reer* of their owne *diviſion* of *ſhot*. The ſecond time they may *flank* their Pikes whilſt they *port*. The third time they may fall in the *Reer* of their Pikes, they in the meane time *charging*. Let the tenth *firing* be performed by way of *Extraduction*, the which being done, the Pikes having charged and being againe *advanced*; Firſt, cauſe thoſe that ſtand *faced* to the *right*, to wheele their *Battell* backe againe to the *left*. Secondly, command the *left flank to march*, and the right *flank to follow on the Reer*. This brings all your Muskettiers into the *Front* and *Reer*.

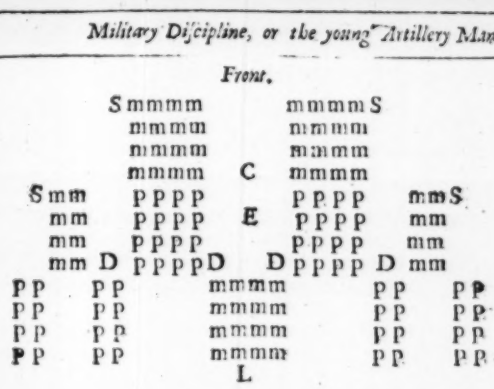
*Note that there muſt a diviſion be made betweene the midſt of the muſkettiers & Pikes of the left flank for the Muſkets to move through. Extraduction as in Chap. 80. The direction to make the following Figure.

Having ſuffered your Souldiers to have a breathing time, come to the eleventh *firing*. To make the *figure*, firſt command *front half-files* (as well Pikes as Muskettiers) open to the *right and left to a convenient diſtance*, to receive another Diviſion) Secondly, command *half-files* of Pikes move to the *right* and *left* untill you ſtand cleer of the Pikes before you. Thirdly, command the four innermoſt *files* (of the *Reer* diviſion) of Muskets move forwards to the *Reer* of the *Interval* between the Pikes. Fourthly, command the two laſt *diviſions* of Pikes, open to the *right* and *left* and make *Intervals* for the two *diviſions* of *ſhot* in the *Reer* to paſſe through, that ſo they may range even a-breaſt with the *Front* of Pikes.

Theſe *Commands* and *directions* duly executed, produceth this following *Figure*.

Front

Front.



Reer.

On this *Figure* wee will *give fire to the Front*, the two *first divisions* may begin the *firing* and the first time fall in the *Reer* of their *own divisions* of Muskettiers, the second time of their *firing* over, they may place themselves in the *Reer* of the Pikes, may charge, and the *Reer divisions* of Muskettiers may move *forwards*, being advanced into convenient ground, they may present and *give fire* together with the two *divisions* of *shot* on the *wings*. Let them *fire* and gaine ground, let them *fire* and maintain ground, let them *fire* and loose ground, falling back againe into the *Reer* behind the *Intervals* of their Pikes. All the Pikes having *charged* may *advance*. By this time sable night begins to appeare and therefore wee will come to *Reducement*.

The Reducements. The Muskettiers may soone close their divisions by reason they stand neer altogether, being so left in this last firing.

The command is; Firſt, command all the Muskettiers to *close their Divisions*.

Secondly, cause the two *Reer divisions* of Pikes, to *close to the right and left inward*, and the two *front divisions* of Pikes *close to the right and left outward*, just before the other *divisions* of Pikes.

Thirdly, command the Muskettiers to *move forwards* and even their *Front* of Pikes. All this being done, your Muskettiers are in the *midst* and the Pikes on their *flanks*. Now if you please to *open* the Muskettiers to the *front* and *reer*, it will make a *Hollow square* for the *Ensigne* to *display* his Colours. If you will come presently to *Reducement*, command your Muskettiers and Pikes to *interchange ground*, and all will be perfectly *reduced* as at first.

Therefore now let us *lodge* our *Colours* with our accustomed *Bene vale* and conclude our *fift* dayes *exercise*, suffering our *Souldiers* to depart to their severall *habitations*; there leaving them to *cleanse their Armes* and to *refresh* their *bodies*, untill the Morrowes *clamouring Drum* invite againe into the *field*.

Chap. 119. *The sixt dayes Exercise.*

HAving the sixth time brought your *Souldiers* into the *field*, according to the accustomed manner; let each *file leader exercise* his *file* in the *Postures* of such *Armes* as they carry; which being performed, and the *files*

files, gaine *re-joyned* into one *Body*, the *Enſigne* being at the head of the Pikes, and the reſt of the Officers in their ſeverall places. The *Captaine* having commanded *ſilence*, *attention* and *obedience*, (three ſpeciall properties moſt neceſſarily requiſite to every common Souldier, he proceeds to the ſeverall *diſtances*, inſtructing them in the *uſes* of each of them. Next after the *diſtances*, he teaches them the *facings*, the *doublings*, the *counter-marches* and the *wheelings*, with ſeverall *obſervations* upon each of the *motions*. After which (having ſo *commanded*,) the *Drums beat*, and the Muſketiers *make ready* for *Skirmiſh*. Then (if you pleaſe) you may cauſe three or four of the firſt *firings* to be performed by *light skirmiſhing* before the *front*, and that with *looſe ranks* or *files*, or both, either ſome of thoſe (or ſuch like) as I have formerly ſpoken of in the preceding *Exerciſes*.

The firſt firing by the diviſions to the front.

After which, for your next *firing*, cauſe you *half-files* to *open* to the *right* and *left* by equall *diviſion*, untill the *Reer diviſions* of Pikes *ſtand right* after the Muſketiers of the *front-diviſion*. Now the Muskettiers ſtanding in four *diviſions*, let them all *preſent* and *give fire* to the *front*, *wheeling all off* to the *right* and *placing* themſelves in the *Reer* of their owne *diviſions* of like *Armes*, each *rank* ſtill making good the Leaders ground. Having *given fire* once, or twice over on this *Figure*.

The ſecond firing is to the front and both flanks marching.

For the ſecond *firing*, cauſe the *front-diviſion* to *give fire* to the *Front*, and the two *reer-diviſions* to each *flank* in a *march*. The *front-diviſion* which *fires* in *rank wheel all off* to the *right*, *placing* themſelves in the *Reer* of their owne *diviſions* of Muſketiers, the other *diviſions* which *fire* in *flanke*, *leading up* their *files* between their owne *diviſions* of Muskettiers and the Pikes.

The third firing is to the front and both flankes ſtanding.

Having *given fire* once or other over according to diſcretion this way, let the third *firing* be performed upon a *ſtand*: for the which, cauſe your *reer-diviſions* to *face* to the *right* and *left outward*, the *front-diviſion* ſtill to continue the ſame *aſpect*.

Then let the Muskettiers *give fire*, thoſe of the *right flank wheeling off* to the *right*, and the contrary *flank* to the contrary *hand*, the Muskettiers of the *front-diviſion placing* themſelves in the *reer* of their owne *diviſions* of Muskets, the Muskettiers of the *reer-diviſions placing* themſelves in the *reer* (of the *reer-diviſions*) of Pikes. When they have *fired all over*, let the Pikes *charge* to *front* and both *flanks*.

The fourth firing is to the reere and both flanks marching. The fifth

Having advanced your Pikes againe and *faced* your *body* to the *front proper*, each *Armes* ſtill ſtandeth in three *diviſions*.

Then let the fourth *firing* be to the *reer* and both *flanks* upon a *march*. And to that end *open* your *front-diviſions* of Muskettiers to the *right* and *left* untill they are *cleer* of the *reer-diviſions* of Pikes, that ſo they be not *troubleſome* unto them in their *march*. Then let your Pikes *ſhoulder*, and the Muskettiers *give fire*, the *front-diviſions* of Muskettiers *firing* in *flanke*, and *leading up* on the inſide of their owne *diviſions*. The Muskettiers of the *reer-diviſion giving fire* in *diviſion* to *rank wheeling off* by *diviſion* and placing themſelves in the *front* of their

Having *[illegible]* Pikes *charged*, let your fifth *firing* be to the *reer* and both *flanks* upon a *[illegible]* which, let the *halfe-files* (both Muſket-

[illegible] to the *reer*, the *front-diviſion* to the *right and left*, and ſo *give*

fire

fire on each part: those that fire to the flanks wheeling off, and placing themselves in the *reer* of their divisions of *Pikes*, and the *Muskets* of the *reer* divisions wheeling off to the right and left, and placing themselves in the *reer* of their owne divisions of *Musketiers*: each rank moving forwards into their Leaders ground Having fired over, let the *Pikes* charge. The *Pikes* being againe advanced, face the whole body to the proper *front*: and then all the *Musketiers* will be in the midst, and the *Pike men* on the flanks.

The first is a firing tripartite as in Cap. 94.

For the sixt firing, Cause your *halfe-ranks* of the left, double your right flank by division. For further directions, look back to the *tripartite firing*: which you shall find, *Chapter* 94. Having fired over that way; *charged*, and *readvanced* your *Pikes*: face the whole body to their former *front*.

The seventh is a firing to both flanks in the reer divisions.

For your seventh firing, cause the *front* and *reer* divisions of Musketiers and Pikes, to face to the right: the rest of the body (both Muskets and Pikes) to the left. Let the Musketiers give fire, and wheel all off, either to the right or left, and place themselves in the *reer* of their following divisions of Pikes: each rank still moving up into their leaders ground. When there rest but two ranks of each division, to fire, let the Pikes *part*. Having all fired and wheeled away; let the Pikes charge. Then face the whole body to their first *front*; and command the first and last foure ranks to face to the left: and to March, untill they are cleare of the standing part of the Body. Then, Cause the *front halfe-files* to face to the left, the *reer halfe-files*, to the right: and so to close their divisions: and after that to face towards their Leader.

This perfectly reduceth the whole body; every man to his place.

For the eight firing: make the sollid square girdled with Musketiers. For the which, *draw halfe* the *files* of the *right flank* of Musketiers crosse the *front*, and halfe the *files* of Musketiers from the left *flanks* crosse the *Reer*. Then face the whole *body* (both Muskets and Pikes) to the *front*, *reer*, and *flankes*. This done, Let the Musketiers *give fire* and *wheele* off by *division*: placing themselves in the *reer* of their own *divisions* of Musketiers.

The eight firing is the sollid square girdled with shot.

All the time of this *firing*, the *Pikemen* being in *middle* of the Musketiers, have good opportunity (if the *Enemy* be neare) to gall them with their thick *showres* of *feathered shot*. The Musketiers, in the meane time, having *fired once*, *twice*, or *oftner over*, on this figure, draw your *files* of Musketiers backe againe into their places.

The ninth firing is to the front and reer upon Captain Wallers double figure.

Then having faced the whole *body* to the proper *front*, let your *ninth firing* be [Captaine *Wallers double firing*] to the *front* and *reer* after this manner.

First, *Wheel front* and *reer* into the *right flanke*: then *face* them all the same way they were before: which done, cause the *halfe-files* to *face* to the *reer*, and *commana* the Musketiers which are in the *reer* of each *division* of Pikes, to *double* their *front* of Pikes by *division*. Then, let them *face about* and *close* their *divisions*: and so having *refaced* them as they were; let them give *give fire*, *wheel off* and *charge*, according to directions on Captaine *Wallers* figure.

The tenth firing so both flanks standing. The bringers up being now the file-leaders.

For the *tenth firing*, let them *face* to the *right* and *left*, and give fire to both *flanks* upon a *stand*: *wheeling off* by *division*, and *flanking* their *Pikes*.

When the *Pikes* have *charged*, and are againe *advanced*, let the Captaine passe to the *front accidentall* of the *left flanke*, and *face* the rest of the *body* to him, and the next place wheele their *flankes* into the *front*, and so all the *Musketiers* will bee in the *front*; and by *facing* the whole *body*

to the *left*; all the *Muſkettiers* will bee on the *right flanke*.

The eleventh firing is on the Diamond figure.

Let the *eleventh firing* be the *Diamond Battell*. Having *given fire* two or three ſeverall wayes, according to the *directions* upon that *figure*; *charged Pikes*, and reduced them againe into the *Square*: *face* the *body about* to the *right*, and paſſe the Muſkettiers which belong to the *right flank*, between the *ranks* of *Pikes* into their places. Then the *Muſkettiers* of the *left flanke*, being cloſed to their *Pikes* the *Body* will ſtand at their firſt order.

As in cap. 78.

For the *twelfth firing*, make the hollow *Square* girdled with *ſhot*: let them *give fire* upon that *figure* (both without and within) according to the *directions* for that *firing*. Let the Pikes *charge*; and reduce them in the ſame manner as I have diſcourſed upon that *figure*.

The body againe reduced.

The twelfth firing is the hollow ſquare girdled with ſhot as in cap. 105.

For the *thirteenth firing*, make the *Pleſium* as you ſhall find directions in the 106. *Chapter*.

The thirteenth firing is as in cap. 106.

Having made it, *given fire* upon it, and reduced it as at firſt.

The fourteenth firing as in cap. 104.

Let the *fourteenth* and laſt *firing* for this exerciſe bee the hollow *Hearſe* and *Croſſe*. Turne back to the 104. *Chapter*, where you may find ample inſtructions for the *making*, *firing*, and reducing of it. And laſtly, that you may conclude with *triumph*, cauſe your *Enſigne* to be diſplayed in the middle of the hollow Croſſe: and then having *fired*, charged *Pikes*, and reduced your men, according to the directions on that *figure*, your men will bee as at firſt. And therefore, ſeeing that by this time *night* is *come*, and our *powder* gone: wee will here give concluſion to our ſixt dayes exerciſe.

A direction to lodge Colours.

Wherefore, that you may obſerve ſome forme in the lodging of our Colours, cauſe your Muſkettiers to March in the *front* of your Pikes. Then, as they March, let them invert to the *right* and *left*: which is, when the ranks *file* to the *right* and *left* by diviſion. Then, cauſe all your Muſkettiers to face in oppoſition: to cock their *matches*, *guard* their *pans*, and reſt their *Muskets*. In the mean time, let the *Pikes* advance, and cloſe their Ranks and Files to their order. Which being done, the *Captain*, *Lieutenant*, *Enſigne*, and *Drummes* beating a troop, at the head of the Pikes: paſſe through this guard into the appointed place for the allodgement of the *Enſigne*. Then, the *Serjeants* cauſe the Muſkettiers to face all about to the *right*, and *preſent*: and upon the firſt beat of the *Drumme*, they all *give fire* in one *Voley*. And now having performed our ſixt dayes Exerciſe, the *Drumme* beats a *Call*: and makes Proclamation, that every man depart unto his ſeverall home, untill his next Summons into the field.

The ranks of Muſketziers are to file to the right and left outwards.

Chap. 120. *Of the Brigade; the number and way of drawing up a Squadron. Next the compoſing three Squadrons into one Brigade. And laſtly of imbattelling three Brigades, after the manner of the King of* Sweden.

Phillips new Diſcipline raiſed the Macedonian glory.

FOr as much as that *Military mirrour* of our times, *Guſtavus Adelphus* King of *Sweden*: was found not only able to wage a *Warre* with the *Imperiall Auſturian* Bird; But that he *ſoared* even to admiration, *pluming* and *tearing* the beſt *feathers* from his *back* and *wings*, none of his *Commanders*, nor *Generaliſſimos*, being able to withſtand the *torrent* of his *victories*. It cannot bee denied but that (next under God) his *Diſcipline*, and new manner of *Imbattelling* was a great (if not the greateſt) meanes for the achievement

of

of the height of his designes. And therefore as in all the former part of my book, I have explicated, and set forth the *postures, motions, firings, and figures of battell*: to be practised by *files Corporalships, Divisions, Companies, Squadrons*, and some for *larger bodies*. So have I delivered and demonstrated them all by the *number* of 128. men. Whereby all such as have a fancy or delight in the exercise *of the Infantry*, may be so enabled to the work, that they need not continually pore upon two or three *firings* thereby breeding *satiety*: But with delectation to themselves, and profit to their *Souldiers*, may *exercise their bodies* with more *variety*. Vnto which purpose I have also added for the close of this my book, the *number* and *manner* of *Imbattelling* into that forme of the *Swedish Brigade*, which hath proved so fatall a *figure* to the House of *Austria*. The knowledge whereof as I assume not particularly to be mine owne, but a collection. So the *figure* shall be drawne up according to its owne *Tearmes* of *art* and *words* of *direction*. And therefore for the better satisfaction of the desirous, we will begin with a *file* and so proceed untill we have formed a perfect *Brigade*. First, You are to note that six men make a * *rot*. *Three rots of Pikes* make a *Corporalship*: but the *Muskettiers* have foure *files* to a *Cosporalship*: *Three Corporalships* of each Armes makes a *compleat Company*, that is to say *nine rots of Pikes*, and *twelve rots of Muskettiers*, *twenty one rots* together which amounts to the *number* of one hundred twenty six men besides all *Officers*, *Musler-yongs* and *Pasvolants*, foure of these *Companies* make a *Squadron*: and *three such Squadrons*, formes a perfect *Brigade*. The *Squadrons* are sometimes drawne up as this here infolded ‡ *Figure*.

All the figures in my booke are shewne with the number of 128. men.

* *File.*

‡ *One of these squadrons containes 504 men whereof 408. are sometimes drawne up as in this figure. Sometimes they are arranged all a-brest four corporalships being alwaies left in the rear as a reserve, of this more in the Intelligencer.*

By the standing of this *Squadron*, or third part of a *Brigade*: you may easily perceive, how apt and ready they are to be *imbattelled* into any forme, either offensive or defensive. But because I in this Chapter intend no other variety, but onely to shew the drawing up of the *Brigade* it selfe, therefore proceeed we to the demonstration thereof; as it is set forth and expressed in words, By *Collonell Robert Monro, in his book intituled, Monro his expeditions and observations*. His directions in effect are as followeth.

‡ Twelve compleat Companies make up three Squadrons: every Squadron of Pikes and Muskets being drawne up severall apart; the Pikes and Colours on the right hand, the Muskettiers on the left. Three Squadrons thus drawne up, compleats a Brigade of foot to be divided as followeth. (*viz*) eight Corporalships of Muskettiers, being thirty two *Rots* divided into foure plottons, every plotton being eight in *front*, led off by a Captaine, and every division after him led up by a sufficient Officer: till comming to a hault all are drawn in even front. Next after these, the thirty six rots of Pikes are to follow, being twelve Corporalships) with their Colours, a Captaine leading off the first five rots before the foure Colours should stirre. Then the Ensignes should lead off the next division, their furers with their colours following them till they are drawne up even in front with the thirty two rots of Muskettiers. This makes the right wing of the Brigade. Secondly, the battell of Pikes moveth forwards in divisions doing in all respects as the former; untill they range even in Front, with the Pikes of the right wing. Then the other thirty two rots of Muskettiers belonging to the middle Squadron who are appointed to make the battell of the brigade) are to be led up as the first Muskettiers in all

‡ 126. *Men a compleat Company. Plottons are small divisions. Even with the front but on the left flank.*

points: but to be drawne up at a reaſonable diſtance, behind the Pikes of their owne ſquadron. Thirdly, the laſt ſquadron of Pikes marcheth up in all reſpects obſerving the former order: moving forwards untill they have attained to range even in front with the other Pikes. After them marcheth forwards the thirty two rots of Musketiers (in foure diviſions) obſerving the former directions, untill they are equall in front with the whole Pikes, which maketh up the left wing.

Even with the left ſtroke.

This being done, the Battell (or middle ſquadron) of Pikes and Muskets are to advance forwards in one body, till they are cleare of the Pikes and Muſketiers of the wings. Laſtly, the ſurplus of the three ſquadrons being forty eight rots of Muskettiers, are drawne up behind the Brigade: where they are to attend the commands of their Officers, either to guard the Baggage or Cannon, to bee Convoyes to bring ammunition or victuals to the reſt; or to continue a reſerve to waite upon all occaſions. Obſerve the figure of the Brigade, upon the other ſide.

The ſurplus of each ſquadron is 16. rots which together makes 48. rots.

A compleat *Brigade* (ſaith Collonell *Monro*) conſiſts of twelve Companies, each company containing 126. men. The which is to bee underſtood of full and compleat companies. Otherwiſe and moſt uſually of two *Regiments*, eight Companies making a *Regiment* conſiſting of one thouſand and eight men. So that one *Regiment* and halfe of whole and full companies, would perfect a *Brigade*: or two *Regiments* of torne and broken companies, the overplus being alwayes added to the *Reſerve*. Notwithſtanding it ſo happened at the *Battell* of *Lutzen* that *Mitzlaff*, *Gerſtorfs*, and *Roſſes*, three craſed *Regiments* made up but one *Brigade*, being the outmoſt *Brigade* to the left of the ſecond *Range*. And towards night in the ſame forenamed *Battell* going to *rallie up* the two broken and ſhattered *Brigades* of yellow and blew, belonging to *Grave Neels* and Collonell *Wincle*, there were not men enough left unhurt and killed, wherewith to make one Squadron (or third of a *Brigade*) to make another *charge*. Let this ſuffice both for the number and order for the drawing up and making the *Swediſh Brigade*. If any be deſirous to know the places of the Commanders and Officers of the *Brigade*, there is a *draught* communicated by my Lord of *Reay*, and ſet forth in the *Swediſh Intelligencer*.

The Sweds have but 8 Companies in a Regiment.

Looke the Swediſh Intelligencer.

The deſcription of the Battell of Lutzen *pag. 198.*

The Intelligencer.

I ſhould now ſhew you the manner how the *Musketiers* performe their *firings* on this *Figure*. The which by all information that hitherto I could gather, have been theſe two: namely by * advancing or gaining ground, or by *Salves*, powring on ſhowers of Lead, by firing two or three *Rankes* together. I might here adde how uſefull a Weapon our *Halfe-pikes* would prove in this *figure*: eſpecially if the adverſe party had any Horſe in the midſt, or between his *Regiments*, as it happened *Tilly* to have in his *Battell* of *Lieipſich*. But I willingly forbeare, that ſo I might demonſtrate the ſtanding of three *Brigades* together in order of *Battell*, according to the uſuall and accuſtomed manner of *Imbattelling* by that invincible King of *Sweden* of never dying memory; who placed them as in this enſuing *figure*. The *Battell* of the following *Brigade* being alwayes placed directly behind the *Intervall Diviſion*, or ſpace of ground between the two wings of the former *Brigades*.

** Introduction.*

A ſalve is when two, three, or more ranks powr out all their ſhot together in one volhe, as we uſually doe with our half-pikes.

This paines gentle Reader, have I taken for thy good, the which if it find a kindly and courteous acceptance, ſhall be to me a *guardoun* or ſatisfaction

ſufficient

ſufficient for my labour and patience. As for the envious, who (like the Dog in the Manger) *will neither eate himſelfe nor willingly ſuffer them that would*, it muſt be imputed to their cinicall diſpoſitions, who ſquare other mens endeavours according to the crooked line of their owne conceits. Condemning things commendable in others, but neither ſaying or doing any thing conſiderable themſelves. Another ſort there be, that would ſeem to carry the port of knowledge about them, yet infected with ſo much malignity, that being requeſted of their opinions, they will anſwer with an *Italian ſtring*, or ſome ſuch like mimick geſture, thereby inſinuating a kind of doubtfulneſſe of things amiſſe, when themſelves are not able to render a reaſon of their diſtaſt. I have beene toucht with the venom'd teeth of a third ſort, who have rendred themſelves ſo irrationall and ſtupidly beſtiall, that their tongues ſerve them but as inſtruments to wound and goare the Reputations of men, then themſelves much more deſerving. But ſeeing that to diſplay their follies were but to ſoile the purity of my ſubject, I will leave them to the amendment of their errours; deſiring once more of the courteous and well knowing *Readers*, that they will put a faire conſtruction on mine, and the Printers overſights, by which they will not onely demonſtrate the goodneſſe of their owne diſpoſitions, but put a further obligation upon him that will ever be ready to ſerve them,

The Glory be to God.

FINIS.

THE CONTENTS OF

Every Chapter Contained in this Booke.

Concerning Postures and handling of Armes Chap. 1. Pag. 1
Of the Postures of the Musket p. 2
Of the Postures of the Pike c. 2. p. 4
Of the Drumme c. 3. p. 5
Of Ranks and Files, their places and dignities c. 4. p. 6
Reasons for precedency of dignity in Ranks and Files c. 5. p. 7
Of severall Distances c. 6. p. 13
Of marching a Company in Divisions, order and places of Officers. c. 7. p. 15
Of drawing the Divisions up into a square c. 8. p. 16
What is Facing, and the use of the word, whether to be used or refused c. 9. p. 17
Of facing square, and how to performe it, the usefulnesse of facing, and the severall parts thereof c. 10. p. 18
Of doubling, the use and parts c. 11. p. 20
Of Inversion and Conversion, and of doubling ranks c. 12. p. 23
Of doublings of files c. 13. p. 24
Of doublings by bringers up c. 14. p. 25
Of doublings of files outward and inward c. 15. p. 26.
Of doubling by half files c. 16. p. 27.
Of doubling the reere by front halfe files c. 17. p. 28
Of doubling the reer by countermarch c. 18. p. 29
Of doubling flanks by wayes of Countermarch c. 19. p. 30
Of doubling half files to the right intire, to accommodate the doubling of half ranks c. 20. p. 31
The difference between intire and divisionall doubling, and of doubling half files intire c. 21 p. 33
Of doubling the front inward intire c. 22. p. 34
Of half files doubling the front by division c. 23. p. 35
Of doubling the reer by division c. 24. p. 36
Of doubling the reer intire, by the front halfe files c. 25. p. 37
Of doubliug by half ranks intire c. 26. p. 38
Of doubling of flanks by division c. 27. p. 40
Of doubling ranks intire c. 28 p. 41
Of doubling files intire, advancing c. 29. p. 42
Of files doubling their depth c. 30. p. 43
Of conversion and inversion, with their words of command, and reducements c. 31. p. 44
Of files filing in sequence c. 32. p. 46
Of inverting ranks, or ranks filing c. 33. p. 46
Of ranks filing by division, and how usefull c. 34. p. 48
Of the severall parts of conversion, and how they are to be understood c. 35. p. 50
Of ranks wheeling by conversion. c. 36. p. 51
Of files ranking in equall parts c. 37. p. 53
The conclusion of doublings c. 38. p. 55
Of Countermarches. The antiquity, and words of direction c. 39. p. 56
Of the Chorean Countermarch, and the way to performe it c. 40. p. 58
Of Countermarching to lose ground c. 41 p. 59
Of Countermarches to gaine ground, or the Macedonian Countermarch c. 42. p. 60
Of the Bastard Countermarch c. 43. p. 61
Of Countermarching rankes to maintaine ground c. 44. p. 61
Of Countermarching ranks to loose ground c. 45. p. 62
Of the Macedonian Countermarch by ranke c. 46. p. 62
Of Countermarching Front and Reere to the midst c. 47. p. 63

Of

Of bringing Front and Reer together into the midſt by the Baſt. Countermarch c. 48. p. 64
A diviſionall Countermarch, to make a large interval betweene the firſt and laſt Ranke c. 49. p. 65
Of making a large interval betweene the firſt and laſt ranks by the Macedonian Countermarch c. 50. p. 66
Of interchanging the ground c. 51. p. 67
Of countermarching the flanks (or wings) into the midſt of the battell c. 52. p. 68
Of countermarching to take the ground before the flanks c. 53. p. 69
Of countermarching to take the ground on the outſide of the flanks, and to direct their aſpects inwards c. 54. p. 70
Of taking the ground on the outſide of the flanks, not altering the aſpects c. 55. p. 71
Of interchanging ground by the flanks and bringing the innermoſt files of Pikes to become the outmoſt ranks c. 56. p. 72
Of wheelings, their kinds and uſes, with their ſeverall words of command c. 57. p. 75
Of wheeling Angular c. 58. p. 76
Of wheeling on the Center c. 59. p. 77
Of wheeling off by diviſion c. 60. p. 77
Of wheeling the front inward, toward the reer c. 61. p. 78
Of bringing the flanks into the front of the battell c. 62. p. 79
Of wheeling the reer into the midſt of the battell c. 63. p. 81
Of wheeling the right flank into the midſt of the battell c. 64. p. 82
Of wheeling the left flank into the midſt of the battell c. 65. p. 84
Of wheeling front and reer into the midſt of the battell c. 66. p. 85
Of wheeling the flanks into the midſt of the battell c. 67. p. 86
Of making men file leaders ſucceſſivly, the files being eight deep c. 68. p. 88
Of making men file leaders ſucceſſively, the files being but ſix deep c. 69. p. 90
Of making men file leaders ſucceſſivly, according to precedency and dignity in file c. 70. p. 92
Of making men file leaders by dignity, the files being ſix deep c. 71. p. 94
Of drawing the files againe into a body, and preparing them for skirmiſh c. 72. p. 161
Of firing by forlorne files, the manner and the uſe c. 73. p. 162
Of firing by two ranks, ten paces advanced before the front, next even with the front, and laſtly even with the halfe files c. 74. p. 164
Of the Horne battell how to make it, and to reduce it by firing c. 75. p. 166
Of the Demy-hearſe battell, the uſe of the figure, how to make it, and to reduce it by firing c. 76. p. 168
Of giving fire, advancing by way of Introduction with the beneficiall uſe of the Bow and Pike c. 77. p. 169
The way to make the Diament battell, ſeverall wayes to fire upon it, with diverſe other figures and firings which are thereby produced c. 78. p. 170.
Of the Convex half Moone, the uſe of the figure, and of ſeverall wayes of firing upon it c. 79. p. 174
Of extraduction, with ſeverall uſes, firings, and reducements c. 80. p. 175
Of the broad fronted battell, with the wayes of firing upon it c. 81. p. 177
Of diſmarching or firing in the hearſe, the ſeverall wayes, and how they ought to be performed c. 82. p. 178
Of firings in flanke, in generall and more particularly, of the gathering firing c. 83. p. 180
The ſecond manner of giving fire to the flanke c. 84. p. 182
A firing in flanke led off by the bringers up c. 85. p. 183
The differences between firing in flank marching, and of bringing the Muſkettiers on the outſide of the Pikes c. 86. p. 184
Of firing in flanke, and placing the Muſkettiers in the midſt of the battell of Pikes, with their firings from thence proceeding c. 87. p. 185
Of firing to the front and reer upon a march c. 88. p. 187
A ſecond way of firing to the front, and reere c. 89. p. 188
Firing to the reer and right flanke marching c. 90. p. 190

Of firing to both flanks marching c. 91. p. 191
A firing to both flanks ſtanding c. 92. p. 192
Captaine Wallers Triple firing to the front c. 93. p. 193
A firing Tripartite, doing execution to the front, reer, and right flank c. 94. p. 194
The Sconce Battell c. 95. p. 195
Of firing by three files at once, two of them ſtanding oblique, the other direct c. 96. p. 196
A firing oblique, by four files together, in form of a W. c. 97. p. 197
Of the front battell, the way to make, and to reduce it c. 98. p. 198
Of the Croſſe battell, how to make it with a private Company, the way to fire upon it, with other diſcourſes, concerning the neceſſities inforcing that figure; with the meanes to make it more defenſive and ſerviceable, and laſtly the way to reduce it c. 99. p. 199
Of the hollow fronted Croſſe battell how to make it with a private Company, and the way to fire upon it c. 100. p. 201
Of firing upon the Square battell flanked with Pikes c. 101. p. 202
Of the ancient manner of imbattelling the Plinthium, the placing of each Armes, and the uſe of the figure c. 102 p. 203
Another hollow ſquare for march c. 103. p. 205
Of the hearſe battell, and of the hollow hearſe and croſſe c. 104. p. 206
Of the Hollow ſquare girdled with ſhot c. 105. p. 209
Of the ſollid ſquare, with Muſketiers in the Center and Angles, the way to make the figure with a private Company, how to fire upon it, and to reduce it c. 106. p. 211
Of the double Croſſe battell, and ſeverall other formes from thence proceeding c. 107. p. 213
Why it is neceſſary to know variety of formes, the way to make four ſeverall figures, demonſtrated in this Chapter, with their Reducements c. 108. p. 216
The trayned bands one of the three main ſtrengths of this land, the wayes to make them perfect Souldiers in the handling of their Armes: The Checker battell, with ſeverall other formes, either for a Company or Regiment c. 109. p. 219
How a Captaine or ſuperiour Commander ought to be qualified, the uſe of variety of formes and figures of battell with ſeveall regiment all formes that may be practiſed with a ſingle Company, and the reducements c. 110. p. 223
Of the Muket and Half-pike, with the ſeverall wayes that have beene tried to make the Muſketiers defenſible againſt the Horſe; as alſo ten queries objected, to the Half-pike and Muſkets c. 111. p. 228
The ten queries objected to the Muket and Half-pike fully anſwered. The Half-pike joyned with the Muket approved to be very uſefull, as having received approbation from divers Souldiers of great rank and quality c. 112. p. 230
Of the Half pike, how it may be ſerviceable on all formes: with ſeverall figures, indifferently uſefull to the Half-pike or Reſt, with the Poſtures of the Half-pike and Muket c. 113. p. 234
The firſt dayes exerciſe c. 114. p. 239
The ſecond dayes exerciſe c. 115. p. 240
The third dayes exerciſe c. 116. p. 243
The fourth dayes exerciſe c. 117. p. 246
The fifth dayes exerciſe c. 118. p. 251
The ſixth dayes exerciſe c. 119. p. 255
Of the Brigade, the number and way of drawing up a ſquadron. Next the compoſing three ſquadrons into one Brigade, and laſtly of imbattelling three Brigades, after the manner of the King of Sweden c. 120. p. 259

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~~John Kimer~~

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